

For Delaval please

101302

Access DB#

# SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: SABHA GAZ Examiner #: 74141 Date: 8/15/03  
Art Unit: 1616 Phone Number 305-3910 Serial Number: 10/035,217  
Mail Box and Bldg/Room Location: 2D19 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*  
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Vit D3 Derivatives  
Inventors (please provide full names): KAZUYA TAKENOUCHI et al

Earliest Priority Filing Date: 3/4/2000 PCT/JP 99/05826

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

*Vit. D.  
Please search for the compd of  
formula (1) when Z is (1-5)  
for broader search (1-5) RS  
51-60-5 RS1*

*Please search attached sheets*

*Thank you*

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Reference Librarian  
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101302-101303-101304-101305-101306-101307-101308-101309-101310-101311-101312-101313-101314-101315-101316-101317-101318-101319-101320-101321-101322-101323-101324-101325-101326-101327-101328-101329-101330-101331-101332-101333-101334-101335-101336-101337-101338-101339-101340-101341-101342-101343-101344-101345-101346-101347-101348-101349-101350-101351-101352-101353-101354-101355-101356-101357-101358-101359-101360-101361-101362-101363-101364-101365-101366-101367-101368-101369-101370-101371-101372-101373-101374-101375-101376-101377-101378-101379-101380-101381-101382-101383-101384-101385-101386-101387-101388-101389-101390-101391-101392-101393-101394-101395-101396-101397-101398-101399-101400-101401-101402-101403-101404-101405-101406-101407-101408-101409-101410-101411-101412-101413-101414-101415-101416-101417-101418-101419-101420-101421-101422-101423-101424-101425-101426-101427-101428-101429-101430-101431-101432-101433-101434-101435-101436-101437-101438-101439-101440-101441-101442-101443-101444-101445-101446-101447-101448-101449-101450-101451-101452-101453-101454-101455-101456-101457-101458-101459-101460-101461-101462-101463-101464-101465-101466-101467-101468-101469-101470-101471-101472-101473-101474-101475-101476-101477-101478-101479-101480-101481-101482-101483-101484-101485-101486-101487-101488-101489-101490-101491-101492-101493-101494-101495-101496-101497-101498-101499-101500-101501-101502-101503-101504-101505-101506-101507-101508-101509-101510-101511-101512-101513-101514-101515-101516-101517-101518-101519-101520-101521-101522-101523-101524-101525-101526-101527-101528-101529-101530-101531-101532-101533-101534-101535-101536-101537-101538-101539-101540-101541-101542-101543-101544-101545-101546-101547-101548-101549-101550-101551-101552-101553-101554-101555-101556-101557-101558-101559-101560-101561-101562-101563-101564-101565-101566-101567-101568-101569-101570-101571-101572-101573-101574-101575-101576-101577-101578-101579-101580-101581-101582-101583-101584-101585-101586-101587-101588-101589-101590-101591-101592-101593-101594-101595-101596-101597-101598-101599-101600-101601-101602-101603-101604-101605-101606-101607-101608-101609-101610-101611-101612-101613-101614-101615-101616-101617-101618-101619-101620-101621-101622-101623-101624-101625-101626-101627-101628-101629-101630-101631-101632-101633-101634-101635-101636-101637-101638-101639-101640-101641-101642-101643-101644-101645-101646-101647-101648-101649-101650-101651-101652-101653-101654-101655-101656-101657-101658-101659-101660-101661-101662-101663-101664-101665-101666-101667-101668-101669-101670-101671-101672-101673-101674-101675-101676-101677-101678-101679-101680-101681-101682-101683-101684-101685-101686-101687-101688-101689-101690-101691-101692-101693-101694-101695-101696-101697-101698-101699-101700-101701-101702-101703-101704-101705-101706-101707-101708-101709-101710-101711-101712-101713-101714-101715-101716-101717-101718-101719-101720-101721-101722-101723-101724-101725-101726-101727-101728-101729-101730-101731-101732-101733-101734-101735-101736-101737-101738-101739-101740-101741-101742-101743-101744-101745-101746-101747-101748-101749-101750-101751-101752-101753-101754-101755-101756-101757-101758-101759-101760-101761-101762-101763-101764-101765-101766-101767-101768-101769-101770-101771-101772-101773-101774-101775-101776-101777-101778-101779-101780-101781-101782-101783-101784-101785-101786-101787-101788-101789-101790-101791-101792-101793-101794-101795-101796-101797-101798-101799-101800-101801-101802-101803-101804-101805-101806-101807-101808-101809-101810-101811-101812-101813-101814-101815-101816-101817-101818-101819-101820-101821-101822-101823-101824-101825-101826-101827-101828-101829-101830-101831-101832-101833-101834-101835-101836-101837-101838-101839-101840-101841-101842-101843-101844-101845-101846-101847-101848-101849-101850-101851-101852-101853-101854-101855-101856-101857-101858-101859-101860-101861-101862-101863-101864-101865-101866-101867-101868-101869-101870-101871-101872-101873-101874-101875-101876-101877-101878-101879-101880-101881-101882-101883-101884-101885-101886-101887-101888-101889-101890-101891-101892-101893-101894-101895-101896-101897-101898-101899-101900-101901-101902-101903-101904-101905-101906-101907-101908-101909-101910-101911-101912-101913-101914-101915-101916-101917-101918-101919-101920-101921-101922-101923-101924-101925-101926-101927-101928-101929-101930-101931-101932-101933-101934-101935-101936-101937-101938-101939-101940-101941-101942-101943-101944-101945-101946-101947-101948-101949-101950-101951-101952-101953-101954-101955-101956-101957-101958-101959-101960-101961-101962-101963-101964-101965-101966-101967-101968-101969-101970-101971-101972-101973-101974-101975-101976-101977-101978-101979-101980-101981-101982-101983-101984-101985-101986-101987-101988-101989-101990-101991-101992-101993-101994-101995-101996-101997-101998-101999-102000-102001-102002-102003-102004-102005-102006-102007-102008-102009-102010-102011-102012-102013-102014-102015-10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=> fil reg

FILE 'REGISTRY' ENTERED AT 14:47:48 ON 17 AUG 2003

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 15 AUG 2003 HIGHEST RN 567484-39-3

DICTIONARY FILE UPDATES: 15 AUG 2003 HIGHEST RN 567484-39-3

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

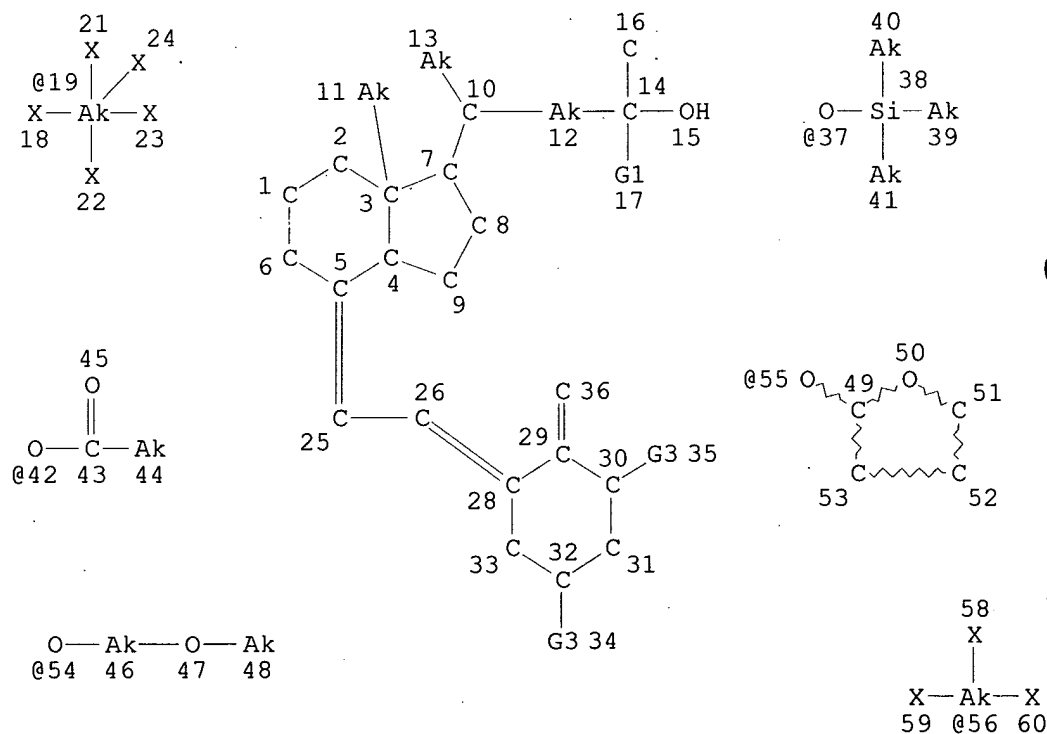
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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L3 STR



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OFFICE OF PETITIONS

VAR G1=AK/56/19

VAR G3=OH/37/42/54/55

NODE ATTRIBUTES:

CONNECT IS M1 RC AT 16

CONNECT IS M1 RC AT 51

CONNECT IS M1 RC AT 52

CONNECT IS M1 RC AT 53

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

Sanjiv Deval  
Reference Librarian  
Chemistry & Chemical Library  
703-308-4498  
sdeval@uspto.gov

## GRAPH ATTRIBUTES:

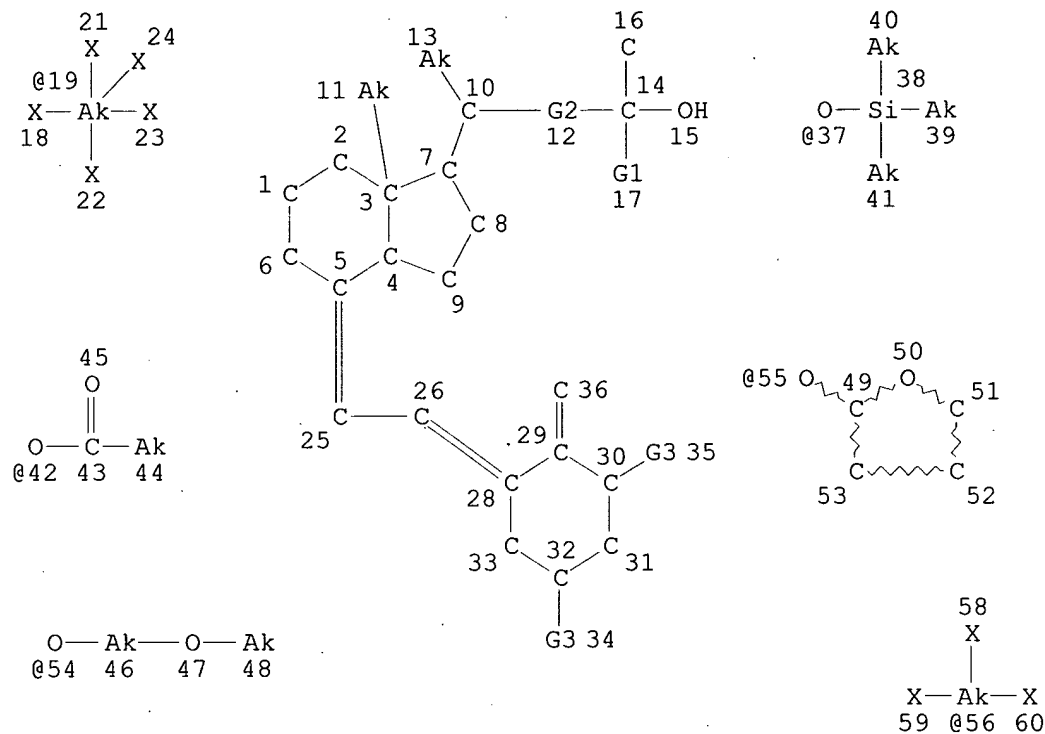
RSPEC 28 5 49

NUMBER OF NODES IS 57

## STEREO ATTRIBUTES: NONE

L5 436 SEA FILE=REGISTRY CSS FUL L3

L10 STR



VAR G1=AK/56/19

REP G2=(1-20) CH2

VAR G3=OH/37/42/54/55

## NODE ATTRIBUTES:

CONNECT IS M1 RC AT 16

CONNECT IS M1 RC AT 51

CONNECT IS M1 RC AT 52

CONNECT IS M1 RC AT 53

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

## GRAPH ATTRIBUTES:

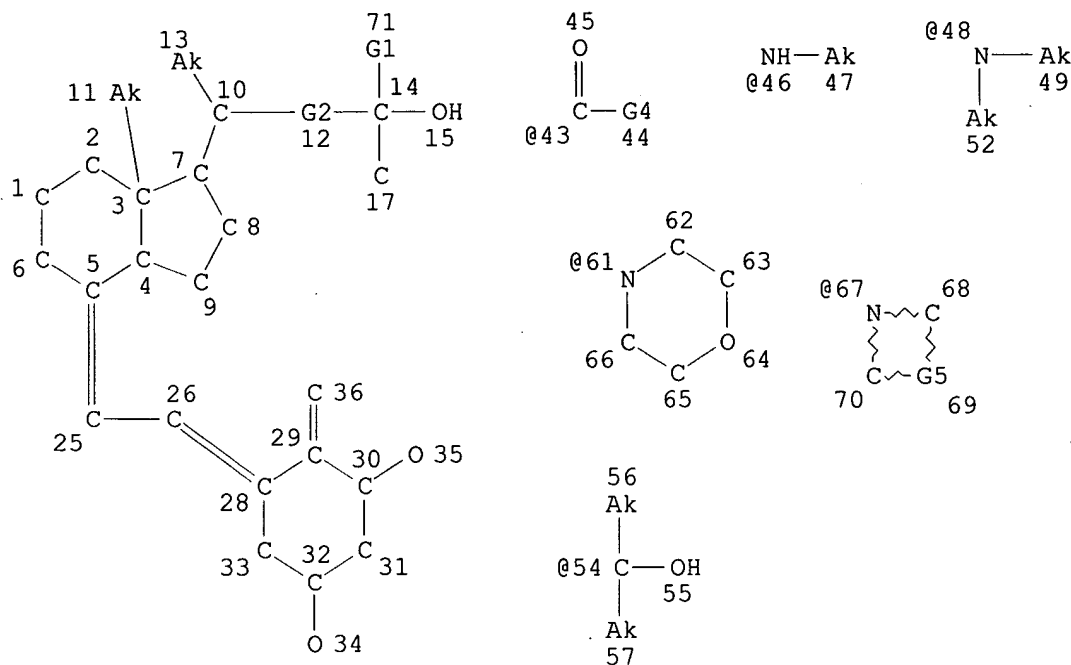
RSPEC 28 5 49

NUMBER OF NODES IS 57

## STEREO ATTRIBUTES: NONE

L11 168 SEA FILE=REGISTRY SUB=L5 SSS FUL L10

L17 STR



VAR G1=54/43  
 REP G2=(1-20) CH2  
 VAR G4=NH2/AK/46/48/61/67  
 REP G5=(1-6) C  
 NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
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 NUMBER OF NODES IS 50

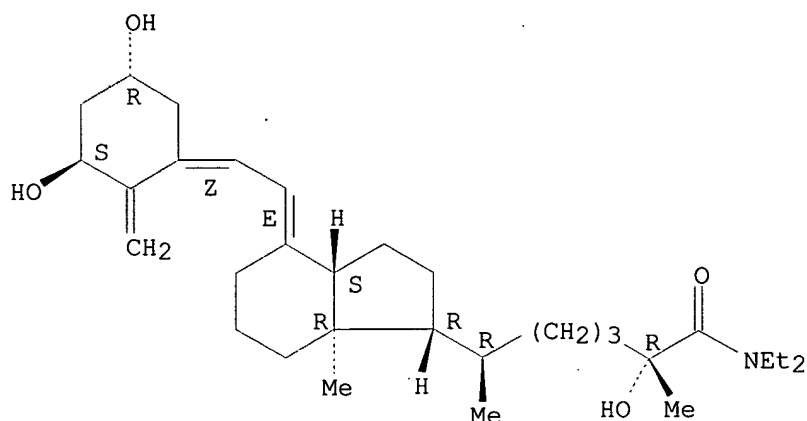
STEREO ATTRIBUTES: NONE

L19 11 SEA FILE=REGISTRY SUB=L11 SSS FUL L17  
 L20 7 SEA FILE=REGISTRY ABB=ON PLU=ON L19 NOT (C28H44O6 OR C29H46O6)

=> d ide can tot 120

L20 ANSWER 1 OF 7 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 266344-80-3 REGISTRY  
 CN 9,10-Secocholesta-5,7,10(19)-trien-26-amide, N,N-diethyl-1,3,25-trihydroxy-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C31 H51 N O4  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

Absolute stereochemistry.  
 Double bond geometry as shown.



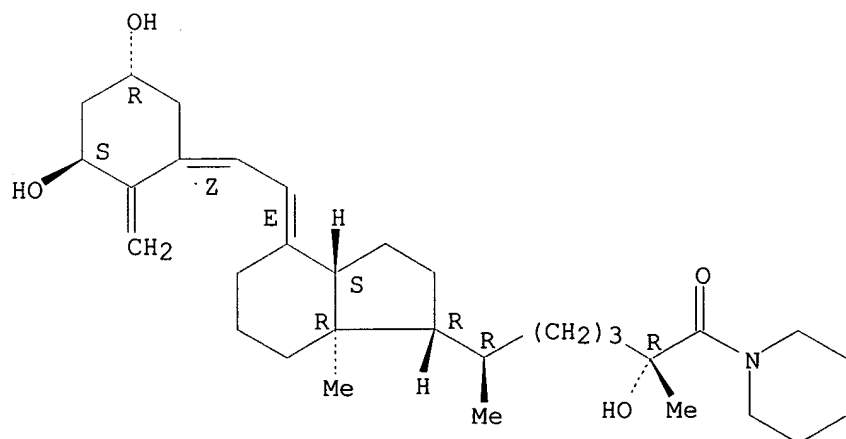
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1937 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1937 TO DATE)

REFERENCE 1: 132:322032

L20 ANSWER 2 OF 7 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 266344-78-9 REGISTRY  
CN Piperidine, 1-[(1.alpha.,3.beta.,5Z,7E,25R)-1,3,25-trihydroxy-26-oxo-9,10-seccholesta-5,7,10(19)-trien-26-yl]- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C32 H51 N O4  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

Absolute stereochemistry.  
Double bond geometry as shown.



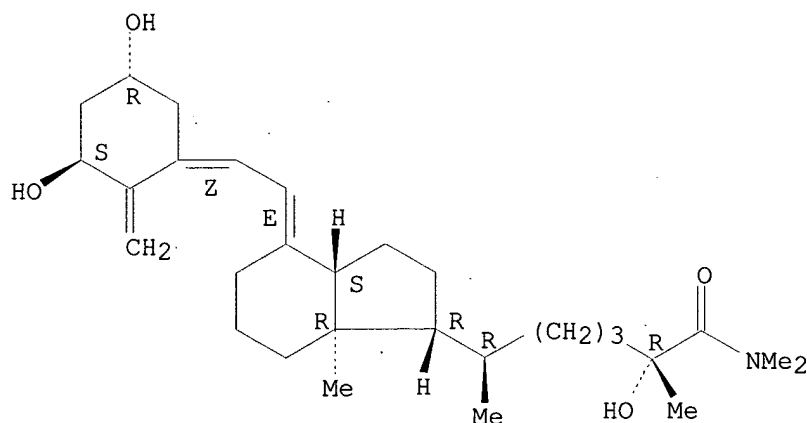
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1937 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1937 TO DATE)

REFERENCE 1: 132:322032

L20 ANSWER 3 OF 7 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 266344-76-7 REGISTRY  
CN 9,10-Secocholesta-5,7,10(19)-trien-26-amide, 1,3,25-trihydroxy-N,N-  
dimethyl-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C29 H47 N O4  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

Absolute stereochemistry.  
Double bond geometry as shown.



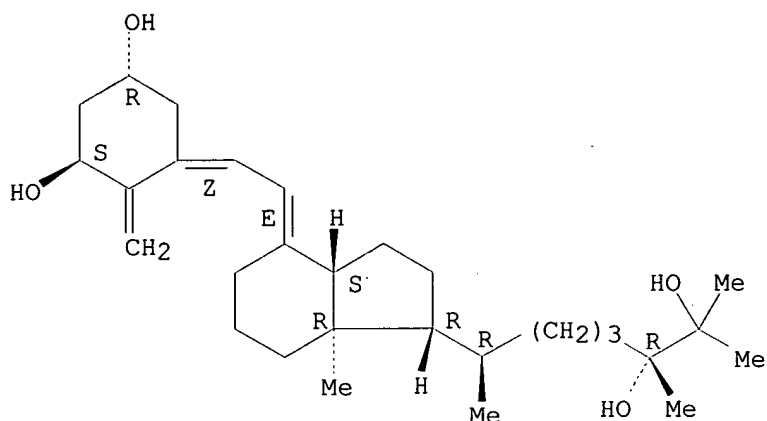
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1937 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1937 TO DATE)

REFERENCE 1: 132:322032

L20 ANSWER 4 OF 7 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 266344-72-3 REGISTRY  
CN 27-Nor-9,10-secocholesta-5,7,10(19)-triene-1,3,25-triol,  
25-(1-hydroxy-1-methylethyl)-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA  
INDEX NAME)  
FS STEREOSEARCH  
MF C29 H48 O4  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

Absolute stereochemistry.  
Double bond geometry as shown.



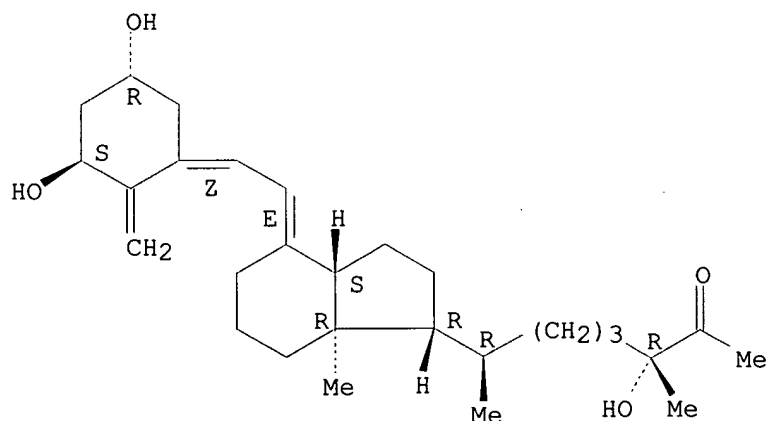
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1937 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1937 TO DATE)

REFERENCE 1: 132:322032

L20 ANSWER 5 OF 7 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 266344-71-2 REGISTRY  
CN Ethanone, 1-[(1.alpha.,3.beta.,5Z,7E,25R)-1,3,25-trihydroxy-27-nor-9,10-seccholesta-5,7,10(19)-trien-25-yl]- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C28 H44 O4  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

Absolute stereochemistry.  
Double bond geometry as shown.



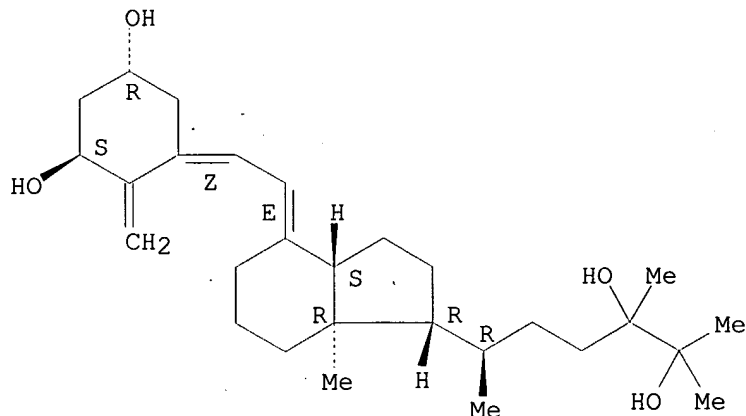
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1937 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1937 TO DATE)

REFERENCE 1: 132:322032

L20 ANSWER 6 OF 7 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 186489-58-7 REGISTRY  
CN 9,10-Secoergosta-5,7,10(19)-triene-1,3,24,25-tetrol,  
(1.alpha.,3.beta.,5Z,7E,24.xi.)- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C28 H46 O4  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.  
Double bond geometry as shown.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

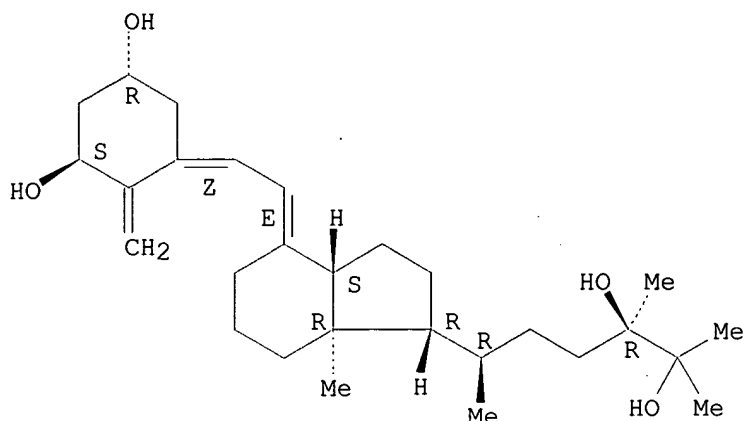
4 REFERENCES IN FILE CA (1937 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1937 TO DATE)

REFERENCE 1: 138:332  
REFERENCE 2: 137:210938  
REFERENCE 3: 126:139903  
REFERENCE 4: 126:139902

L20 ANSWER 7 OF 7 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 179189-36-7 REGISTRY  
CN 9,10-Secoergosta-5,7,10(19)-triene-1,3,24,25-tetrol,  
(1.alpha.,3.beta.,5Z,7E)- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C28 H46 O4  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.  
Double bond geometry as shown.





\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

5 REFERENCES IN FILE CA (1937 TO DATE)  
5 REFERENCES IN FILE CAPLUS (1937 TO DATE)

REFERENCE 1: 130:209851  
REFERENCE 2: 129:197986  
REFERENCE 3: 126:139903  
REFERENCE 4: 126:139902  
REFERENCE 5: 125:123721

=> fil hcaold  
FILE 'HCAOLD' ENTERED AT 14:47:57 ON 17 AUG 2003  
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PRE-1967 CHEMICAL ABSTRACTS FILE WITH HOUR-BASED PRICING  
FILE COVERS 1907-1966  
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> s 120  
L21 0 L20

=> fil hcaplus  
FILE 'HCAPLUS' ENTERED AT 14:48:01 ON 17 AUG 2003  
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FILE COVERS 1907 - 17 Aug 2003 VOL 139 ISS 8  
FILE LAST UPDATED: 15 Aug 2003 (20030815/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 120

L22 8 L20

=> d all hitstr tot

L22 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2003 ACS on STN  
AN 2002:928238 HCAPLUS  
DN 138:332  
TI Method for treating and preventing hyperparathyroidism with active vitamin D compounds  
IN Mazess, Richard B.; Strugnell, Stephen A.; Knutson, Joyce C.  
PA Bone Care International, Inc., USA  
SO U.S. Pat. Appl. Publ., 17 pp., Cont.-in-part of U.S. 6,376,479.  
CODEN: USXXCO  
DT Patent  
LA English  
IC ICM A61K031-59  
NCL 514167000  
CC 1-10 (Pharmacology)  
Section cross-reference(s): 2, 63  
FAN.CNT 19

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002183288	A1	20021205	US 2002-127005	20020419
	US 5602116	A	19970211	US 1995-415488	19950403
	US 5707980	A	19980113	US 1997-798958	19970211
	US 5869473	A	19990209	US 1997-907659	19970808
	US 6242434	B1	20010605	US 1998-86969	19980529
	US 6376479	B1	20020423	US 2000-501093	20000209
PRAI	US 1995-415488	A1	19950403		
	US 1997-798958	A3	19970211		
	US 1997-907659	A2	19970808		
	US 1997-907660	B2	19970808		
	US 1998-86969	A2	19980529		
	US 2000-501093	A2	20000209		
	US 1988-227371	B1	19880802		
	US 1990-569412	A1	19900817		
	US 1991-812056	B1	19911217		
	US 1992-812056	B1	19920305		
	US 1993-119895	A2	19930910		
OS	MARPAT 138:332				
AB	This invention relates to a method for treating or preventing				

hyperthyroidism assocd. with aging and/or with Aging-Related Vitamin D Deficiency (ARVDD) syndrome by administering a sufficient amt. of an active vitamin D compd. utilizing a variety of effective treatment protocols. The invention further relates to treating or preventing one or more of the following conditions, e.g., (1) primary vitamin D deficiency, (2) 1,25-(OH)2D3 deficiency, and (3) 1,25-(OH)2D3 resistance included within the syndrome of ARVDD. Fourteen renal patients enrolled in a clin. trial to study secondary hyperparathyroidism showed baseline intact parathyroid hormone (iPTH) levels greater than 1000 pg/mL (range: 1015-4706 pg/mL). The initial dose of 1.alpha.-(OH)D2 (10 .mu.g-3 times/wk) was increased (max., 20 .mu.g-3 times/wk) or decreased as necessary to attain and maintain iPTH in the range of 150-300 pg/mL. After 11-12 wk of treatment, the iPTH levels of all but two of the patients had decreased to below 1000 pg/mL, and the iPTH levels in nine of the patients had decreased to below 510 pg/mL.

ST vitamin D compd treatment hyperparathyroidism aging; aging related vitamin D deficiency syndrome hyperparathyroidism prevention; parathyroid hormone lowering hydroxyvitamin D2 hyperparathyroidism

IT Aging, animal

Drug delivery systems

Human

Hyperparathyroidism

Hyperthyroidism

Mammalia

Osteoporosis

(active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)

IT Disease, animal

(aging-related vitamin D deficiency syndrome, hyperthyroidism assocd. with; active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)

IT Mineral elements, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(bone, coadministration of agent reducing loss of; active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)

IT Bone

(coadministration of agent reducing loss of; active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)

IT Estrogens

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(conjugated, coadministration of; active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)

IT Kidney, disease

(end stage, secondary hyperparathyroidism treatment in relation to; active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)

IT Drug delivery systems

(injections, i.v.; active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)

IT Bone

(minerals, coadministration of agent reducing loss of; active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)

IT Drug delivery systems

(mucosal; active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)

IT Drug delivery systems

(nasal; active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)

IT Drug delivery systems

(oral; active vitamin D compds. for treating and preventing

- hyperparathyroidism assocd. with aging)
- IT Drug delivery systems  
(parenterals; active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)
- IT Toxins  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(pertussin; coadministration of; active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)
- IT Menopause  
(postmenopause; active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)
- IT Hyperparathyroidism  
(secondary, treatment of, in end stage renal disease; active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)
- IT Hyperparathyroidism  
(tertiary; active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)
- IT Drug delivery systems  
(transdermal; active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)
- IT 13598-36-2D, Phosphonic acid, alkylidenebis- derivs., compds.  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(Bisphosphonate, coadministration of; active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)
- IT 9002-64-6, Parathyroid hormone  
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)  
(active vitamin D compd. for lowering blood serum levels of; active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)
- IT 41294-56-8, 1.alpha.-(OH)D3 57333-96-7, 1.alpha.,24(R)-Dihydroxyvitamin D3  
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
(active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)
- IT 1406-16-2, Vitamin D 7440-70-2, Calcium, biological studies  
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)
- IT 1406-16-2D, Vitamin D, hydroxy compds. 54573-75-0, 1.alpha.-Hydroxyvitamin D2 58050-56-9, 24-Hydroxyvitamin D2 60133-18-8, 1.alpha.,25-Dihydroxyvitamin D2 124043-51-2, 1.alpha.,24-Dihydroxyvitamin D2 131249-38-2, 1.alpha.,25-Dihydroxyvitamin D4 133876-00-3D, 1.alpha.-Hydroxyvitamin D, compds. 143032-85-3, 1.alpha.-Hydroxyvitamin D4 156316-85-7, 1.alpha.,24(S)-Dihydroxyvitamin D2 157893-62-4, 1.alpha.,24-Dihydroxyvitamin D4 **186489-58-7** 254448-88-9, 24-Hydroxyvitamin D4 457048-34-9  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)
- IT 14265-44-2, Phosphate, biological studies  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(binder; active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)
- IT 1406-16-2D, Vitamin D, compds. 7440-42-8, Boron, biological studies 7681-49-4D, Sodium fluoride, compds. 9007-12-9, Calcitonin 13408-78-1, Cobalamin  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)  
 (coadministration of; active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)

IT 32222-06-3, 1,25-Dihydroxy vitamin D3  
 RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (deficiency or resistance, aging-related vitamin D deficiency syndrome including; active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)

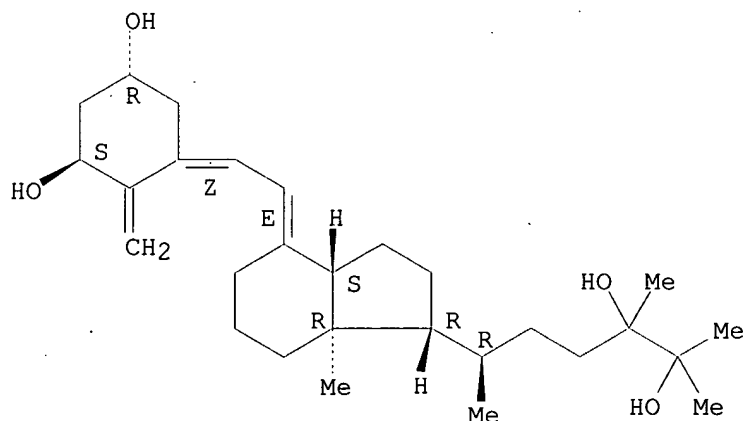
IT 62-54-4, Calcium acetate 471-34-1, Calcium carbonate, biological studies  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (phosphate binder; active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)

IT 186489-58-7  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (active vitamin D compds. for treating and preventing hyperparathyroidism assocd. with aging)

RN 186489-58-7 HCAPLUS

CN 9,10-Secoergosta-5,7,10(19)-triene-1,3,24,25-tetrol,  
 (1.alpha.,3.beta.,5Z,7E,24.xi.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.



L22 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 2002:696655 HCAPLUS  
 DN 137:210938  
 TI Treatment of hyperproliferative diseases using active vitamin D analogues  
 IN Mazess, Richard B.  
 PA Bone Care International, Inc., USA  
 SO U.S. Pat. Appl. Publ., 15 pp., Cont.-in-part of U. S. Ser. No. 891,814.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 IC ICM A61K031-59  
 NCL 514167000  
 CC 1-6 (Pharmacology)  
 FAN.CNT 19

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002128240	A1	20020912	US 2001-995911	20011128
	US 5763429	A	19980609	US 1996-781910	19961230

US 6537982	B1	20030325	US 1998-596149	19980223
US 2002025950	A1	20020228	US 2001-891814	20010626
US 6503893	B2	20030107		
WO 2003045333	A2	20030605	WO 2002-US38263	20021126
WO 2003045333	A3	20030724		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,  
 CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
 PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,  
 NE, SN, TD, TG

PRAI	US 1996-781910	A3	19961230
	US 1998-596149	A2	19980223
	US 2001-891814	A2	20010626
	US 1993-119895	A2	19930910
	US 1994-265438	A2	19940624
	US 1995-415488	A2	19950403
	US 1995-486387	A2	19950607
	US 2001-995911	A	20011128

OS MARPAT 137:210938

AB The present invention provides a method of inhibiting the hyperproliferative cellular activity of neoplasms and other hyperproliferative diseases with an active vitamin D compd. utilizing a high dose, episodic treatment protocol. Patients with advanced androgen-independent prostate cancer were treated i.v. with 1.alpha.,24-dihydroxyvitamin D2.

ST hyperproliferative disease treatment vitamin D analog; prostate cancer treatment dihydroxyvitamin D2 intravenous

IT Prostate gland, neoplasm  
 (adenocarcinoma, metastasis; treatment of hyperproliferative diseases using active vitamin D analogs) .

IT Prostate gland, neoplasm  
 (adenocarcinoma; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Bone, disease  
 (agent treating; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Microtubule  
 (agents inhibiting; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Bone  
 (agents; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Antitumor agents  
 (antibiotic; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Nutrients  
 (antinutrients; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Antibiotics  
 (antitumor; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Anthracyclines  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (antitumor; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Vitamin D receptors  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)

(cells expressing; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Uterus, neoplasm  
(cervix; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Intestine, neoplasm  
(colon; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Uterus, neoplasm  
(endometrium; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Cell proliferation  
Disease, animal  
(hyperproliferative; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Cell differentiation  
(inducers; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Drug delivery systems  
(injections, i.v.; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Leukemia  
(lymphocytic; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Thyroid gland, neoplasm  
(medullary carcinoma; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Leukemia  
(myelogenous; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Neck, anatomical  
(neoplasm; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Drug delivery systems  
(oral; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Bone, neoplasm  
(osteosarcoma; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Drug delivery systems  
(parenterals; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Eye, neoplasm  
(retinoblastoma; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Animal tissue, disease  
(soft, neoplasm, sarcoma; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Carcinoma  
(squamous cell; treatment of hyperproliferative diseases using active vitamin D analogs)

IT Alkylating agents, biological  
Antitumor agents  
Bladder, neoplasm  
Cytotoxic agents  
Drug delivery systems  
Head, neoplasm  
Human  
Liver, neoplasm  
Lung, neoplasm  
Lymphoma  
Mammary gland, neoplasm  
Melanoma

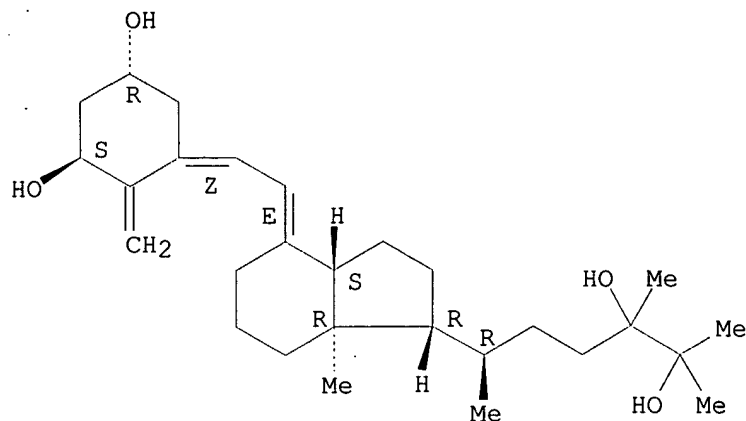
Multiple myeloma  
 Neoplasm  
 Ovary, neoplasm  
 Pancreas, neoplasm  
 Prostate gland, neoplasm  
 Psoriasis  
 Sarcoma  
 Testis, neoplasm

(treatment of hyperproliferative diseases using active vitamin D analogs)

- IT 13598-36-2D, Phosphonic acid, alkylidenebis- derivs., compds.  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (Bisphosphonate, antihypercalcemic agents; treatment of hyperproliferative diseases using active vitamin D analogs)
- IT 1406-16-2D, Vitamin D, analogs or compds.  
 RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (active hypocalcemic; treatment of hyperproliferative diseases using active vitamin D analogs)
- IT 33069-62-4, Paclitaxel 40391-99-9  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (coadministration of active vitamin D and; treatment of hyperproliferative diseases using active vitamin D analogs)
- IT 7440-70-2, Calcium, biological studies  
 RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)  
 (hypercalcemia, reduced risk of; treatment of hyperproliferative diseases using active vitamin D analogs)
- IT 80449-01-0, Topoisomerase  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (inhibitors; treatment of hyperproliferative diseases using active vitamin D analogs)
- IT 19356-17-3, 25-Hydroxyvitamin D3 124043-51-2, 1.alpha.,24-Dihydroxyvitamin D2 131249-38-2, 1.alpha.,25-Dihydroxyvitamin D4 156316-85-7, 1.alpha.,24(S)-Dihydroxyvitamin D2 156316-86-8 157893-62-4, 1.alpha.,24-Dihydroxy vitamin D4  
 RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (treatment of hyperproliferative diseases using active vitamin D analogs)
- IT 7440-06-4D, Platinum, compds. 32222-06-3, 1.alpha.,25-Dihydroxyvitamin D3 54573-75-0, 1.alpha.-Hydroxyvitamin D2 58050-56-9, 24-Hydroxyvitamin D2 60133-18-8, 1.alpha.,25-Dihydroxyvitamin D2 143032-85-3, 1.alpha.-Hydroxyvitamin D4 **186489-58-7** 254448-88-9, 24-Hydroxyvitamin D4 457048-34-9  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (treatment of hyperproliferative diseases using active vitamin D analogs)
- IT **186489-58-7**  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (treatment of hyperproliferative diseases using active vitamin D analogs)
- RN 186489-58-7 HCAPLUS  
 CN 9,10-Secoergosta-5,7,10(19)-triene-1,3,24,25-tetrol, (1.alpha.,3.beta.,5Z,7E,24.xi.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.





L22 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 2000:290993 HCAPLUS  
 DN 132:322032  
 TI Preparation of vitamin D3 derivatives and remedies for inflammatory  
 respiratory diseases containing the same  
 IN Takenouchi, Kazuya; Gao, Qingzhi; Manabe, Kenji; Sogawa, Ryo; Takano,  
 Yasuhiro; Ishizuka, Seichi  
 PA Teijin Limited, Japan  
 SO PCT Int. Appl., 145 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 IC ICM C07C401-00  
 ICS C07F007-18; A61K031-59; A61P003-02; A61P003-14; A61P011-00  
 CC 32-7 (Steroids)  
 Section cross-reference(s): 1, 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000024712	A1	20000504	WO 1999-JP5826	19991022
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	AU 9962281	A1	20000515	AU 1999-62281	19991022
	AU 758792	B2	20030327		
	EP 1123921	A1	20010816	EP 1999-949355	19991022
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
	US 6531460	B1	20030311	US 2001-830167	20010423
	US 2002091109	A1	20020711	US 2002-35219	20020104
	US 6548489	B2	20030415		
	US 2002099039	A1	20020725	US 2002-35211	20020104
	US 2002103173	A1	20020801	US 2002-35217	20020104
	US 2002132799	A1	20020919	US 2002-35251	20020104
PRAI	JP 1998-302321	A	19981023		
	JP 1998-362827	A	19981221		
	JP 1998-365207	A	19981222		
	JP 1998-365208	A	19981222		
	JP 1998-365209	A	19981222		

WO 1999-JP5826 W 19991022  
 US 2001-830167 A3 20010423  
 OS MARPAT 132:322032  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Compds. represented by general formula (I) [wherein R01, R02 being each independently = hydrogen, Me3Si, Et3Si, tert-BuMe2Si, Ac, MeOCH2, or tetrahydro-4H-pyran-2-yl; and Z = a group represented by general formula Q1, Q2, Q3, Q4, (CH2)3C(OH)R51R52; wherein m, n = 0,2; R11, R12 = H, C1-4 alkyl; K = L = M = H; M = H, K and L together form a double bond together with the existing single bond; K = H, L and M together form a double bond together with the existing single bond; CR21R22 = C3-6 cycloalkyl; Q = CFR31, NR31; R21, R22, R23, R31, R45, R46 = H, HO, CO2H, CF3, pentafluoroethyl, C1-4 alkyloxycarbonyl, C2-5 acyloxy, etc.; R32-R35 = H, OH, C1-4 alkyl, C2-5 acyloxy; A, B = H, OH; A and B together form a double bond together with the existing single bond; CX̄Y = CO; one of X and Y = H, the other = OH or C2-5 acyloxy; R41, R42, R43, R44 = H, HO, CF3, pentafluoroethyl, C2-6 acyloxy, C1-4 alkoxy, etc.; D = E = H; D = OH, E = H; D and E or E and R41 together form a double bond together with the existing single bond; R42 = H, HO, CF3, pentafluoroethyl, C2-5 acyloxy, C1-4 alkoxy, etc.; R51 = (un)substituted CONH2, COR55, C(OH)R56R57; R55, R56, R57 = C1-4 alkyl; R52 = Me, Et, CF3, pentafluoroethyl] are prepd. These compds. are useful as active ingredients of the remedies for inflammatory respiratory diseases, malignant tumor, articular rheumatism, osteoporosis, true diabetes, hypertension, alopecia, acne, psoriasis, dermatitis, hypercalcemia, hypofunction of accessory thyroid, or metabolic disorder of cartilage. Thus, intermediate (II) was coupled with (3S,5R)-3,5-bis(trimethylsilyloxy)-1-octen-7-yne in the presence of Ph3P and tris(dibenzylideneacetone)dipalladium-chloroform adduct in PhMe at 100.degree. for 6 h followed by treatment with lithium tetrafluoroborate and H2SO4 in MeCN for 20 min to give title compd. (III). III, administered at 1-20 .mu.g/kg to air way of golden hamster, inhibited 20-40% neutrophil infiltration in a LPS-induced pneumonia model. A tablet formulation contg. III was prepd.

ST vitamin D3 deriv prepn treatment inflammatory respiratory disease

IT Thyroid gland  
 (accessory, hypoactivity of; prepn. of vitamin D3 derivs. as remedies for inflammatory respiratory diseases and other diseases)

IT Respiratory tract  
 (disease, inflammatory; prepn. of vitamin D3 derivs. as remedies for inflammatory respiratory diseases and other diseases)

IT Cartilage  
 (metabolic disorder; prepn. of vitamin D3 derivs. as remedies for inflammatory respiratory diseases and other diseases)

IT Acne  
 Alopecia  
 Anti-inflammatory agents  
 Antidiabetic agents  
 Antihypertensives  
 Antitumor agents  
 Arthritis  
 Dermatitis  
 Osteoporosis  
 Psoriasis  
 (prepn. of vitamin D3 derivs. as remedies for inflammatory respiratory diseases and other diseases)

IT 7440-70-2, Calcium, biological studies  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)

(hypercalcemia; prepn. of vitamin D3 derivs. as remedies for inflammatory respiratory diseases and other diseases)

IT 67-97-ODP, Vitamin D3, derivs. 266343-22-0P 266343-23-1P  
 266343-25-3P 266343-28-6P 266343-32-2P 266343-33-3P 266343-35-5P  
 266343-42-4P 266343-45-7P 266343-49-1P 266343-54-8P 266343-55-9P  
 266343-58-2P 266343-59-3P 266343-68-4P 266343-69-5P 266343-71-9P  
 266343-72-0P 266343-75-3P 266343-85-5P 266343-88-8P 266343-91-3P  
 266343-93-5P 266344-00-7P 266344-11-0P 266344-17-6P 266344-23-4P  
 266344-26-7P 266344-35-8P 266344-38-1P 266344-39-2P 266344-40-5P  
 266344-54-1P 266344-58-5P 266344-60-9P 266344-61-0P 266344-64-3P  
 266344-65-4P 266344-66-5P 266344-67-6P **266344-71-2P**

**266344-72-3P 266344-76-7P 266344-78-9P**

**266344-80-3P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of vitamin D3 derivs. as remedies for inflammatory respiratory diseases and other diseases)

IT 219842-24-7P 219842-25-8P 219842-26-9P 219842-27-0P

RL: BPN (Biosynthetic preparation); PUR (Purification or recovery); RCT (Reactant); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of vitamin D3 derivs. as remedies for inflammatory respiratory diseases and other diseases)

IT 67-64-1, Acetone, reactions 75-11-6, Diiodomethane 75-15-0, Carbon disulfide, reactions 75-77-4, Trimethylsilyl chloride, reactions 98-59-9, p-Toluenesulfonyl chloride 104-94-9, 4-Methoxyaniline 107-21-1, 1,2-Ethanediol, reactions 107-30-2, Chloromethyl methyl ether 110-89-4, Piperidine, reactions 151-50-8, Potassium cyanide 506-59-2, Dimethylamine hydrochloride 660-68-4, Diethylamine hydrochloride 872-50-4, reactions 930-30-3, 2-Cyclopenten-1-one 930-68-7, 2-Cyclohexenone 1034-49-7, (Bromomethyl)triphenylphosphonium bromide 1120-72-5, 2-Methylcyclopentanone 1774-47-6, Trimethylsulfoxonium iodide 2537-48-6, Diethyl cyanomethylphosphonate 2605-67-6, Methyl (triphenylphosphoranylidene)acetate 3282-30-2, Trimethylacetyl chloride 4224-69-5, Methyl 2-bromomethylacrylate 27374-25-0, (1-Ethoxycyclopropyloxy)trimethylsilane 52928-63-9, 1-Hydroxy-2-pyrrolidinone 64190-52-9 66057-04-3, 2,2-Dimethoxycyclopentanone 81037-06-1 85909-08-6 112828-13-4 112924-91-1 134523-96-9 161055-41-0 173388-43-7 173388-56-2 173522-65-1 266343-46-8 266344-59-6 266686-81-1

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of vitamin D3 derivs. as remedies for inflammatory respiratory diseases and other diseases)

IT 66774-80-9P 93489-60-2P 114694-12-1P 124905-24-4P 135604-76-1P  
 147352-03-2P 160156-85-4P 165465-89-4P 165465-90-7P 171283-36-6P  
 173388-40-4P 173388-41-5P 175271-49-5P 218437-75-3P 219842-21-4P  
 219842-22-5P 219842-23-6P 219842-28-1P 219842-33-8P 219842-34-9P  
 219842-35-0P 266343-12-8P 266343-13-9P 266343-14-0P 266343-15-1P  
 266343-16-2P 266343-17-3P 266343-18-4P 266343-19-5P 266343-20-8P  
 266343-21-9P 266343-24-2P 266343-27-5P 266343-29-7P 266343-30-0P  
 266343-31-1P 266343-34-4P 266343-36-6P 266343-37-7P 266343-38-8P  
 266343-39-9P 266343-40-2P 266343-41-3P 266343-43-5P 266343-44-6P  
 266343-47-9P 266343-48-0P 266343-50-4P 266343-51-5P 266343-52-6P  
 266343-53-7P 266343-56-0P 266343-57-1P 266343-60-6P 266343-61-7P  
 266343-62-8P 266343-63-9P 266343-64-0P 266343-65-1P 266343-66-2P  
 266343-67-3P 266343-70-8P 266343-73-1P 266343-74-2P 266343-78-6P  
 266343-81-1P 266343-82-2P 266344-05-2P 266344-08-5P 266344-14-3P  
 266344-20-1P 266344-29-0P 266344-32-5P 266344-47-2P 266344-50-7P  
 266344-53-0P 266344-55-2P 266344-56-3P 266344-57-4P 266344-62-1P  
 266344-63-2P 266344-68-7P 266344-69-8P 266344-70-1P 266344-73-4P  
 266344-74-5P 266344-75-6P 266344-77-8P 266344-79-0P 266686-83-3P

266686-86-6P 266686-88-8P 266686-90-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of vitamin D3 derivs. as remedies for inflammatory respiratory diseases and other diseases)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Chugai Pharmaceutical Co Ltd; JP 07173133 A 1995 HCAPLUS

(2) Teijin Limited; JP 06329696 A HCAPLUS

(3) Teijin Limited; US 5604257 A HCAPLUS

(4) Teijin Limited; EP 970948 A1 HCAPLUS

(5) Teijin Limited; EP 619305 A1 1994 HCAPLUS

(6) Teijin Limited; WO 9858909 A1 1998 HCAPLUS

(7) Teikoku Hormone Mfg Co Ltd; JP 1149747 A 1999

IT 266344-71-2P 266344-72-3P 266344-76-7P

266344-78-9P 266344-80-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

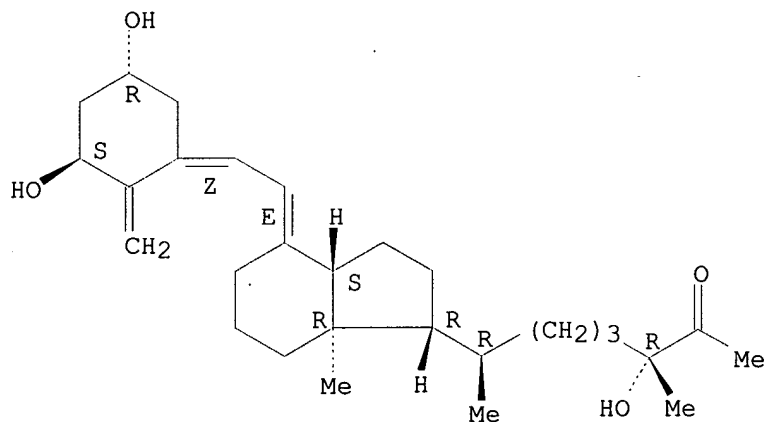
(prepn. of vitamin D3 derivs. as remedies for inflammatory respiratory diseases and other diseases)

RN 266344-71-2 HCAPLUS

CN Ethanone, 1-[(1.alpha.,3.beta.,5Z,7E,25R)-1,3,25-trihydroxy-27-nor-9,10-secocholesta-5,7,10(19)-trien-25-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

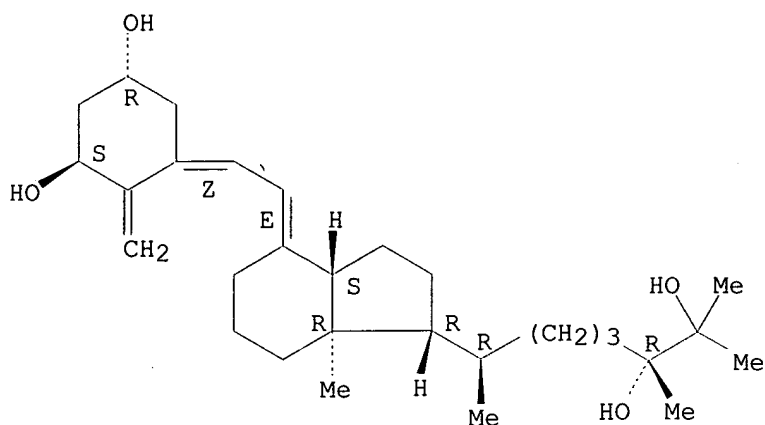


RN 266344-72-3 HCAPLUS

CN 27-Nor-9,10-secocholesta-5,7,10(19)-trien-1,3,25-triol, 25-(1-hydroxy-1-methylethyl)-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

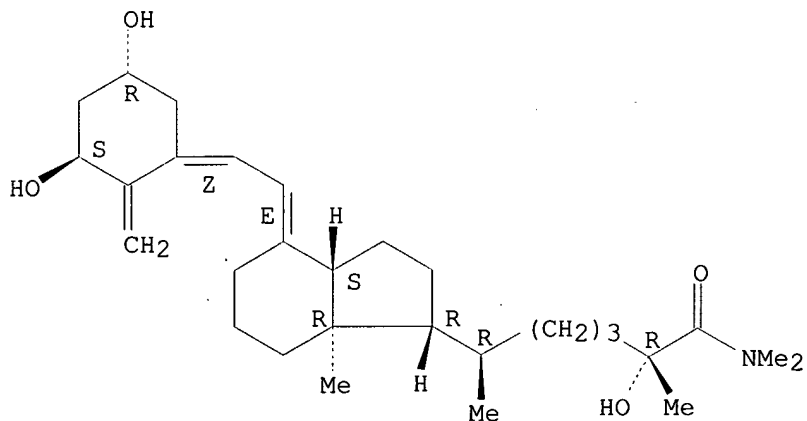
Double bond geometry as shown.



RN 266344-76-7 HCAPLUS

CN 9,10-Secocholesta-5,7,10(19)-trien-26-amide, 1,3,25-trihydroxy-N,N-dimethyl-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA INDEX NAME)

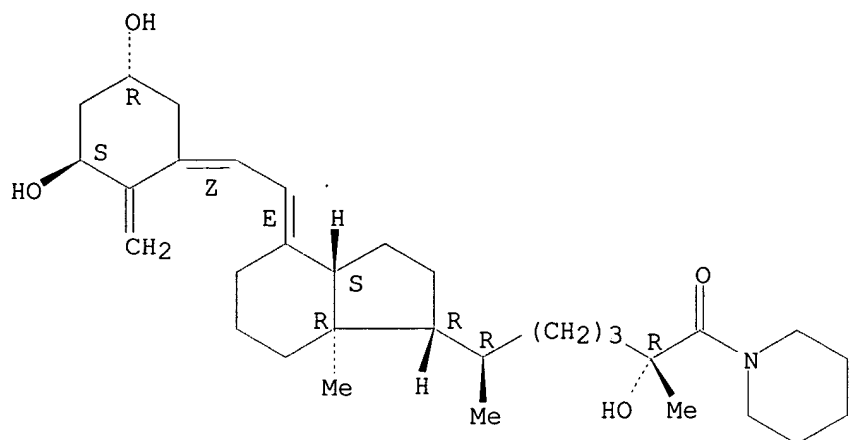
Absolute stereochemistry.  
Double bond geometry as shown.



RN 266344-78-9 HCAPLUS

CN Piperidine, 1-[(1.alpha.,3.beta.,5Z,7E,25R)-1,3,25-trihydroxy-26-oxo-9,10-secocholesta-5,7,10(19)-trien-26-yl]- (9CI) (CA INDEX NAME)

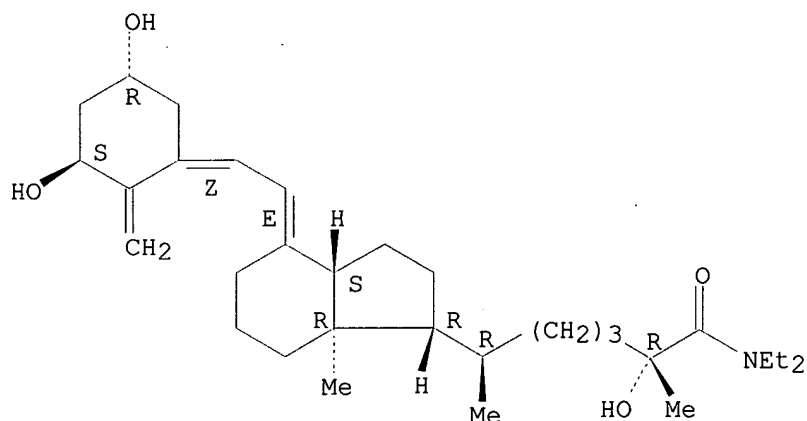
Absolute stereochemistry.  
Double bond geometry as shown.



RN 266344-80-3 HCAPLUS

CN 9,10-Secocholesta-5,7,10(19)-trien-26-amide, N,N-diethyl-1,3,25-trihydroxy-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



L22 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1999:106958 HCAPLUS

DN 130:209851

TI Preparation of active vitamin D derivatives and their use as bone density improvers, differentiation inducers, and immunosuppressants causing no hypercalcemia

IN Tachibana, Yoji

PA Nisshin Flour Milling Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C07C401-00

ICS A61K031-59

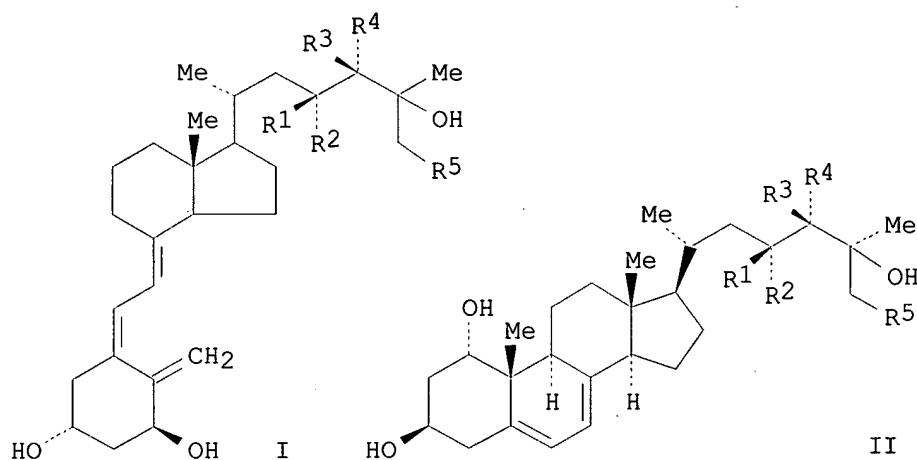
CC 32-7 (Steroids)

Section cross-reference(s): 1, 63

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 11035553 A2 19990209 JP 1997-194200 19970718  
 PRAI JP 1997-194200 19970718  
 OS MARPAT 130:209851  
 GI



AB The derivs. I (R1, R2, R5 = H, OH; R1 = R2 .noteq. OH; R3, R4 = H, OH, Me; R3 = R4 .noteq. H, Me) are prepd. by irradsn. of diene compds. II (R1-R5 = same as above) with UV ray, then thermal isomerization. II (R1 = R2 = R3 = H, R4 = Me, R5 = OH) (200 mg) was irradiated with a high-pressure Hg lamp for 10 min and subjected to thermal isomerization to give 24 mg I (R1 = R2 = R3 = H, R4 = Me, R5 = OH). The product showed high affinity to 1,25-dihydroxyvitamin D3 receptor.

ST bone density improver vitamin D prepn; vitamin D prepn immunosuppressant differentiation inducer; UV irradsn thermal isomerization diene

IT Mineral elements, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (bone; prepn. of active vitamin D derivs. as bone d. improvers,  
 differentiation inducers, and immunosuppressants causing no  
 hypercalcemia)

IT Cell differentiation

(inducers; prepn. of active vitamin D derivs. as bone d. improvers,  
 differentiation inducers, and immunosuppressants causing no  
 hypercalcemia)

IT Bone

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (minerals; prepn. of active vitamin D derivs. as bone d. improvers,  
 differentiation inducers, and immunosuppressants causing no  
 hypercalcemia)

IT Immunosuppressants

(prepn. of active vitamin D derivs. as bone d. improvers,  
 differentiation inducers, and immunosuppressants causing no  
 hypercalcemia)

IT Osteoporosis

(therapeutic agents; prepn. of active vitamin D derivs. as bone d.  
 improvers, differentiation inducers, and immunosuppressants causing no  
 hypercalcemia)

IT 179189-36-7P 220856-83-7P 220875-68-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
 study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);  
 BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of active vitamin D derivs. as bone d. improvers,

differentiation inducers, and immunosuppressants causing no hypercalcemia)

IT 93748-47-1 93748-50-6 125315-65-3 131249-32-6 220856-84-8  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prepn. of active vitamin D derivs. as bone d. improvers, differentiation inducers, and immunosuppressants causing no hypercalcemia)

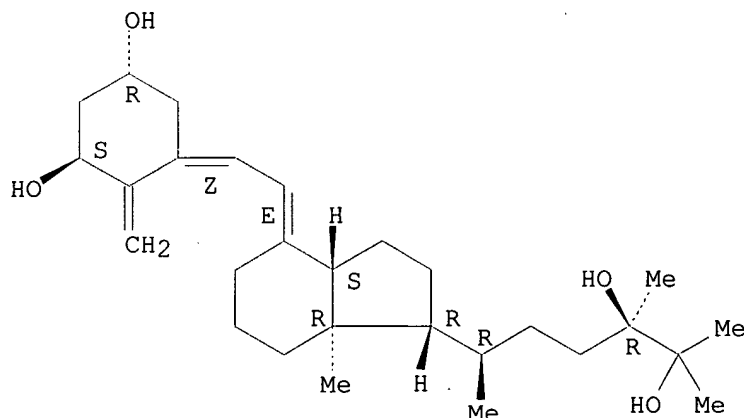
IT 83872-23-5P 152912-16-8P 220856-78-0P 220856-79-1P 220856-80-4P  
 220856-81-5P 220856-85-9P 220856-86-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. of active vitamin D derivs. as bone d. improvers, differentiation inducers, and immunosuppressants causing no hypercalcemia)

IT 83872-22-4P 220856-82-6P 220856-87-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of active vitamin D derivs. as bone d. improvers, differentiation inducers, and immunosuppressants causing no hypercalcemia)

IT 179189-36-7P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of active vitamin D derivs. as bone d. improvers, differentiation inducers, and immunosuppressants causing no hypercalcemia)

RN 179189-36-7 HCAPLUS  
 CN 9,10-Secoergosta-5,7,10(19)-triene-1,3,24,25-tetrol,  
 (1.alpha.,3.beta.,5Z,7E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.



L22 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 1998:582860 HCAPLUS  
 DN 129:197986  
 TI Method of inhibiting the hyperproliferation of malignant cells with 1.alpha.-hydroxy vitamin D4 and analogs, pharmaceutical and cosmetic compositions, and preparation of 5,6-cis-1.alpha.-hydroxy vitamin D4  
 IN Knutson, Joyce C.; Bishop, Charles W.  
 PA Bone Care International, Inc., USA  
 SO U.S., 12 pp., Cont.-in-part of U.S. Ser. No. 265,438.  
 CODEN: USXXAM  
 DT Patent  
 LA English



IC ICM A61K031-59  
 NCL 514167000  
 CC 1-6 (Pharmacology)  
 Section cross-reference(s): 32, 63

FAN.CNT 19

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5798345	A	19980825	US 1995-486387	19950607
	US 6025346	A	20000215	US 1994-265438	19940624
	US 5488120	A	19960130	US 1994-296084	19940824
	US 5801164	A	19980901	US 1995-480310	19950607
	US 5756783	A	19980526	US 1995-524889	19950907
	WO 9640153	A1	19961219	WO 1996-US9221	19960606
	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9663791	A1	19961230	AU 1996-63791	19960606
	AU 718625	B2	20000420		
	EP 831839	A1	19980401	EP 1996-923223	19960606
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
	CN 1186435	A	19980701	CN 1996-194460	19960606
	JP 11506791	T2	19990615	JP 1996-501597	19960606
	BR 9608488	A	19991130	BR 1996-8488	19960606
	US 5763429	A	19980609	US 1996-781910	19961230
	CA 2222593	AA	19961219	CA 1997-2222593	19970606
	US 6537982	B1	20030325	US 1998-596149	19980223
PRAI	US 1990-586854	B1	19900921		
	US 1991-800045	B2	19911129		
	US 1992-886554	B1	19920520		
	US 1994-265438	A2	19940624		
	US 1992-827173	B1	19920129		
	US 1992-991493	B1	19921217		
	US 1993-119895	A2	19930910		
	US 1994-261730	B3	19940617		
	US 1995-415488	A2	19950403		
	US 1995-486387	A	19950607		
	WO 1996-US9221	W	19960606		
	US 1996-781910	A3	19961230		
AB	1.alpha.-Hydroxy vitamin D4 and analogs, preferably 1,24 dihydroxy vitamin D4 are useful as active compds. of pharmaceutical compns. for the inhibition of hyperproliferative activity of malignant cells. Prepn. of 5,6-cis-1.alpha.-hydroxy vitamin D4 is described.				
ST	neoplasm inhibition hydroxy vitamin D4				
IT	Intestine, neoplasm (colon, inhibitors; hydroxy vitamin D4 and analogs for malignant cell hyperproliferation inhibition, pharmaceutical and cosmetic compns., and prepn. of 5,6-cis-1.alpha.-hydroxy vitamin D4)				
IT	Antitumor agents (colon; hydroxy vitamin D4 and analogs for malignant cell hyperproliferation inhibition, pharmaceutical and cosmetic compns., and prepn. of 5,6-cis-1.alpha.-hydroxy vitamin D4)				
IT	Cosmetics (creams; hydroxy vitamin D4 and analogs for malignant cell hyperproliferation inhibition, pharmaceutical and cosmetic compns., and prepn. of 5,6-cis-1.alpha.-hydroxy vitamin D4)				
IT	Antitumor agents Cosmetics Drug delivery systems (hydroxy vitamin D4 and analogs for malignant cell hyperproliferation				

- inhibition, pharmaceutical and cosmetic compns., and prepn. of 5,6-cis-1.alpha.-hydroxy vitamin D4)
- IT Cell differentiation  
(inducers; hydroxy vitamin D4 and analogs for malignant cell hyperproliferation inhibition, pharmaceutical and cosmetic compns., and prepn. of 5,6-cis-1.alpha.-hydroxy vitamin D4)
- IT Antitumor agents  
(leukemia; hydroxy vitamin D4 and analogs for malignant cell hyperproliferation inhibition, pharmaceutical and cosmetic compns., and prepn. of 5,6-cis-1.alpha.-hydroxy vitamin D4)
- IT Cosmetics  
Drug delivery systems  
(lotions; hydroxy vitamin D4 and analogs for malignant cell hyperproliferation inhibition, pharmaceutical and cosmetic compns., and prepn. of 5,6-cis-1.alpha.-hydroxy vitamin D4)
- IT Antitumor agents  
(mammary gland; hydroxy vitamin D4 and analogs for malignant cell hyperproliferation inhibition, pharmaceutical and cosmetic compns., and prepn. of 5,6-cis-1.alpha.-hydroxy vitamin D4)
- IT Mammary gland  
(neoplasm, inhibitors; hydroxy vitamin D4 and analogs for malignant cell hyperproliferation inhibition, pharmaceutical and cosmetic compns., and prepn. of 5,6-cis-1.alpha.-hydroxy vitamin D4)
- IT Drug delivery systems  
(ointments, creams; hydroxy vitamin D4 and analogs for malignant cell hyperproliferation inhibition, pharmaceutical and cosmetic compns., and prepn. of 5,6-cis-1.alpha.-hydroxy vitamin D4)
- IT Drug delivery systems  
(ointments; hydroxy vitamin D4 and analogs for malignant cell hyperproliferation inhibition, pharmaceutical and cosmetic compns., and prepn. of 5,6-cis-1.alpha.-hydroxy vitamin D4)
- IT Drug delivery systems  
(oral; hydroxy vitamin D4 and analogs for malignant cell hyperproliferation inhibition, pharmaceutical and cosmetic compns., and prepn. of 5,6-cis-1.alpha.-hydroxy vitamin D4)
- IT Drug delivery systems  
(topical; hydroxy vitamin D4 and analogs for malignant cell hyperproliferation inhibition, pharmaceutical and cosmetic compns., and prepn. of 5,6-cis-1.alpha.-hydroxy vitamin D4)
- IT 58-61-7, Adenosine, biological studies 11103-57-4, Vitamin A  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(hydroxy vitamin D4 and analogs for malignant cell hyperproliferation inhibition, pharmaceutical and cosmetic compns., and prepn. of 5,6-cis-1.alpha.-hydroxy vitamin D4)
- IT 58-74-2, Papaverine 131249-38-2 143032-85-3 157893-62-4  
**179189-36-7**  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(hydroxy vitamin D4 and analogs for malignant cell hyperproliferation inhibition, pharmaceutical and cosmetic compns., and prepn. of 5,6-cis-1.alpha.-hydroxy vitamin D4)
- IT 7440-70-2, Calcium, biological studies  
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)  
(hydroxy vitamin D4 and analogs for malignant cell hyperproliferation inhibition, pharmaceutical and cosmetic compns., and prepn. of 5,6-cis-1.alpha.-hydroxy vitamin D4)
- IT 83465-05-8P  
RL: BYP (Byproduct); PREP (Preparation)  
(hydroxy vitamin D4 and analogs for malignant cell hyperproliferation

inhibition, pharmaceutical and cosmetic compns., and prepn. of  
5,6-cis-1.alpha.-hydroxy vitamin D4)

IT 511-28-4P, Vitamin D4 516-79-0P 2579-14-8P 58261-88-4P 59969-08-3P  
60045-90-1P 143032-83-1P 186489-59-8P 186489-60-1P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(prepn. and reaction; hydroxy vitamin D4 and analogs for malignant cell  
hyperproliferation inhibition, pharmaceutical and cosmetic compns., and  
prepn. of 5,6-cis-1.alpha.-hydroxy vitamin D4)

IT 57-87-4, Ergosterol 108-24-7, Acetic anhydride  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction; hydroxy vitamin D4 and analogs for malignant cell  
hyperproliferation inhibition, pharmaceutical and cosmetic compns., and  
prepn. of 5,6-cis-1.alpha.-hydroxy vitamin D4)

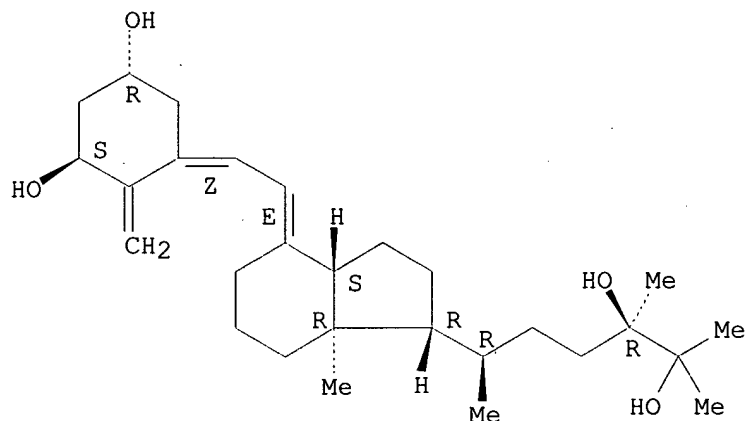
RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE

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IT 179189-36-7  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES  
(Uses)  
(hydroxy vitamin D4 and analogs for malignant cell hyperproliferation  
inhibition, pharmaceutical and cosmetic compns., and prepn. of  
5,6-cis-1.alpha.-hydroxy vitamin D4)

RN 179189-36-7 HCAPLUS  
CN 9,10-Secoergosta-5,7,10(19)-triene-1,3,24,25-tetrol,  
(1.alpha.,3.beta.,5Z,7E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



L22 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1997:134848 HCAPLUS

DN 126:139903

TI Use of vitamin D4 hydroxy derivatives for treating skin disorders,  
preparation, biological activity, and pharmaceutical and cosmetic  
compositions

IN Knutson, Joyce C.; Bishop, Charles W.

PA Bone Care International, Inc., USA

SO PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K031-59

CC 1-12 (Pharmacology)

Section cross-reference(s): 26, 62, 63

FAN.CNT 19

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9640154	A1	19961219	WO 1996-US9222	19960606
	W:	AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT			
	RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
	US 5763428	A	19980609	US 1995-484342	19950607
	AU 9662569	A1	19961230	AU 1996-62569	19960606
	EP 831838	A1	19980401	EP 1996-921322	19960606
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI			
	JP 11506792	T2	19990615	JP 1996-501598	19960606
PRAI	US 1995-484342	A	19950607		
	US 1990-586854	B1	19900921		
	US 1991-800045	B2	19911129		
	US 1992-886554	B1	19920520		
	US 1994-265438	A2	19940624		
	WO 1996-US9222	W	19960606		
AB	1.alpha.-Hydroxyvitamin D4 (I) and analogs, including 1,25-dihydroxyvitamin D4 and 1,24-dihydroxyvitamin D4, are disclosed which are useful as active compds. of pharmaceutical compns. for the treatment of disorders of calcium metab. and various skin disorders (skin cancer, dermatitis, eczema, etc.). I was effective increasing serum calcium in				

vitamin D-deficient rats. Synthesis of I is described, as are pharmaceutical and cosmetic compns. contg. 1.alpha.,24-dihydroxyvitamin D4. Antiproliferative activity, as well as its use in treatment of osteoporosis and psoriasis, are described.

ST vitamin D4 hydroxy deriv prepn pharmaceutical; cosmetic vitamin D4 hydroxy deriv prepn; skin disorder vitamin D4 hydroxy deriv; cancer skin vitamin D4 hydroxy deriv; osteoporosis psoriasis vitamin D4 hydroxy deriv; dermatitis eczema vitamin D4 hydroxy deriv; calcium disorder vitamin D4 hydroxy deriv

IT Intestine

(calcium transport; vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and pharmaceutical and cosmetic compns.)

IT Cosmetics

(creams; vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and combination pharmaceutical and cosmetic compns.)

IT Bone

(d.; vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and pharmaceutical and cosmetic compns.)

IT Hydration, physiological

(dermal, cellular proliferative effects of; vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and pharmaceutical and cosmetic compns.)

IT Skin, neoplasm

Skin, neoplasm

(inhibitors; vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and pharmaceutical and cosmetic compns.)

IT Biological transport

(intestinal calcium; vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and pharmaceutical and cosmetic compns.)

IT Cosmetics

Drug delivery systems

(lotions; vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and combination pharmaceutical and cosmetic compns.)

IT Drug delivery systems

(ointments, creams, topical; vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and combination pharmaceutical and cosmetic compns.)

IT Drug delivery systems

(ointments; vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and combination pharmaceutical and cosmetic compns.)

IT Drug delivery systems

(oral; vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and pharmaceutical and cosmetic compns.)

IT Drug delivery systems

(parenterals; vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and pharmaceutical and cosmetic compns.)

IT Sebum

(secretion, cellular proliferative effects of; vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and pharmaceutical and cosmetic compns.)

IT Antitumor agents

Antitumor agents

(skin; vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and pharmaceutical and cosmetic compns.)

IT Drug delivery systems

(topical; vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and pharmaceutical and cosmetic compns.)

IT Anti-inflammatory agents

Cell differentiation

Cell proliferation

Cosmetics

(vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and combination pharmaceutical and cosmetic compns.)

IT Retinoids

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and combination pharmaceutical and cosmetic compns.)

IT Dermatitis

Drug delivery systems

Eczema

Osteoporosis

Psoriasis

Skin, disease

(vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and pharmaceutical and cosmetic compns.)

IT Osteocalcins

RL: BOC (Biological occurrence); BSU (Biological study, unclassified);

BIOL (Biological study); OCCU (Occurrence)

(vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and pharmaceutical and cosmetic compns.)

IT Vitamin D receptors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and pharmaceutical and cosmetic compns.)

IT Adrenoceptor agonists

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(.beta.-; vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and combination pharmaceutical and cosmetic compns.)

IT 41903-66-6D, Chromanol, derivs.

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(Chromanol; vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and combination pharmaceutical and cosmetic compns.)

IT 511-28-4P, Vitamin D4 516-79-0P, 22,23-Dihydroergosterol 2418-45-3P, Ergosterol acetate 2579-14-8P 58261-88-4P 59969-08-3P 60045-90-1P 143032-83-1P, Vitamin D4 tosylate 186489-59-8P 186489-60-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction; vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and pharmaceutical and cosmetic compns.)

IT 57-87-4, Ergosterol

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction; vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol. activity, and pharmaceutical and cosmetic compns.)

IT 7440-70-2, Calcium, biological studies

RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)

(vitamin D4 hydroxy deriv. in increase of serum calcium level in vitamin D-deficient rats)

IT 1406-16-2, Vitamin D

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(vitamin D4 hydroxy deriv. in increase of serum calcium level in vitamin D-deficient rats)

IT 58-61-7, Adenosine, biological studies 58-74-2, Papaverine 11103-57-4, Vitamin A

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol.

activity, and combination pharmaceutical and cosmetic compns.)

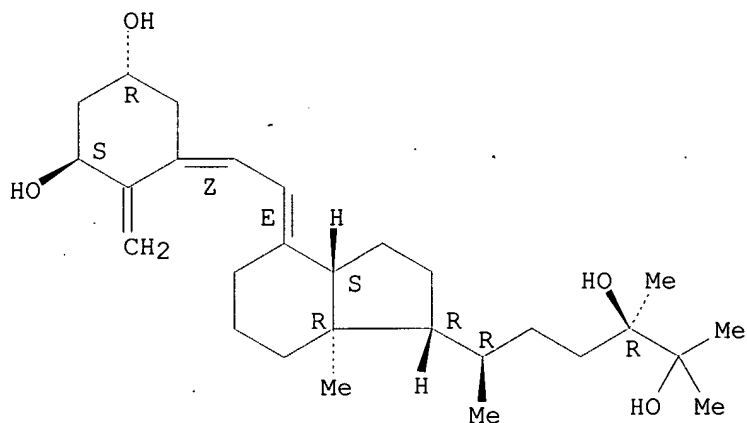
IT 83465-05-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol.  
 activity, and pharmaceutical and cosmetic compns.)

IT 131249-38-2 143032-85-3 157893-62-4 **179189-36-7**  
**186489-58-7**  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol.  
 activity, and pharmaceutical and cosmetic compns.)

IT **179189-36-7 186489-58-7**  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (vitamin D4 hydroxy derivs. for treating skin disorders, prepn., biol.  
 activity, and pharmaceutical and cosmetic compns.)

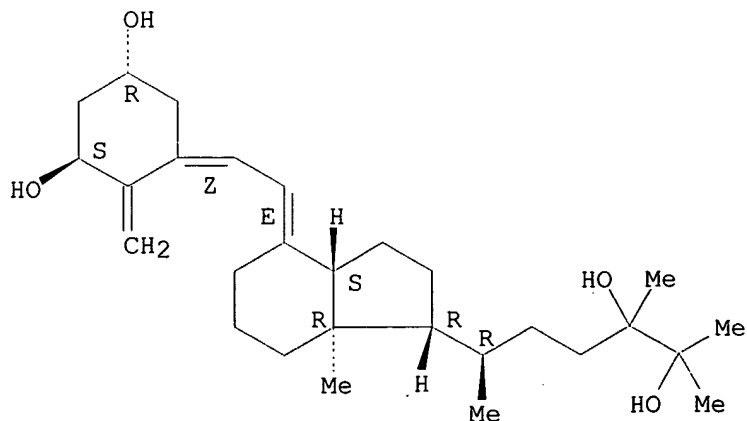
RN 179189-36-7 HCAPLUS  
 CN 9,10-Secoergosta-5,7,10(19)-triene-1,3,24,25-tetrol,  
 (1.alpha.,3.beta.,5Z,7E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.



RN 186489-58-7 HCAPLUS  
 CN 9,10-Secoergosta-5,7,10(19)-triene-1,3,24,25-tetrol,  
 (1.alpha.,3.beta.,5Z,7E,24.xi.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.



L22 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1997:132772 HCAPLUS

DN 126:139902

TI Use of vitamin D4 hydroxy derivatives for treating cancer and disorders of calcium metabolism, preparation, biological activity, and pharmaceutical and cosmetic compositions

IN Knutson, Joyce C.; Bishop, Charles W.

PA Bone Care International, Inc., USA

SO PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K031-59

CC 1-12 (Pharmacology)

Section cross-reference(s): 26, 62, 63

FAN.CNT 19

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9640153	A1	19961219	WO 1996-US9221	19960606
	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 5798345	A	19980825	US 1995-486387	19950607
	AU 9663791	A1	19961230	AU 1996-63791	19960606
	AU 718625	B2	20000420		
	EP 831839	A1	19980401	EP 1996-923223	19960606
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
	JP 11506791	T2	19990615	JP 1996-501597	19960606
	BR 9608488	A	19991130	BR 1996-8488	19960606
PRAI	US 1995-486387	A	19950607		
	US 1990-586854	B1	19900921		
	US 1991-800045	B2	19911129		
	US 1992-886554	B1	19920520		
	US 1994-265438	A2	19940624		
	WO 1996-US9221	W	19960606		
AB	1.alpha.-Hydroxyvitamin D4 (I) and analogs, preferably 1,24-dihydroxyvitamin D4, are disclosed which are useful as active compds. of pharmaceutical compns. for the treatment of disorders of calcium metab. and breast and colon cancers. I was effective increasing serum calcium in vitamin D-deficient rats. Synthesis of I is described, as are pharmaceutical and cosmetic compns. contg. 1.alpha.,24-dihydroxyvitamin D4. Antiproliferative activity, as well as its use in treatment of osteoporosis and psoriasis, are described.				
ST	vitamin D4 hydroxy deriv prepn pharmaceutical; cosmetic vitamin D4 hydroxy deriv prepn; antitumor vitamin D4 hydroxy deriv prepn; psoriasis vitamin D4 hydroxy deriv prepn; osteoporosis vitamin D4 hydroxy deriv prepn; calcium disorder vitamin D4 hydroxy deriv				
IT	Biological transport (calcium intestinal; vitamin D4 hydroxy derivs. for treating cancer and disorders of calcium metab., prepn., biol. activity, and pharmaceutical and cosmetic compns.)				
IT	Intestine (calcium transport; vitamin D4 hydroxy derivs. for treating cancer and disorders of calcium metab., prepn., biol. activity, and pharmaceutical and cosmetic compns.)				
IT	Intestine, neoplasm (colon, inhibitors; vitamin D4 hydroxy derivs. for treating cancer and disorders of calcium metab., prepn., biol. activity, and pharmaceutical and cosmetic compns.)				

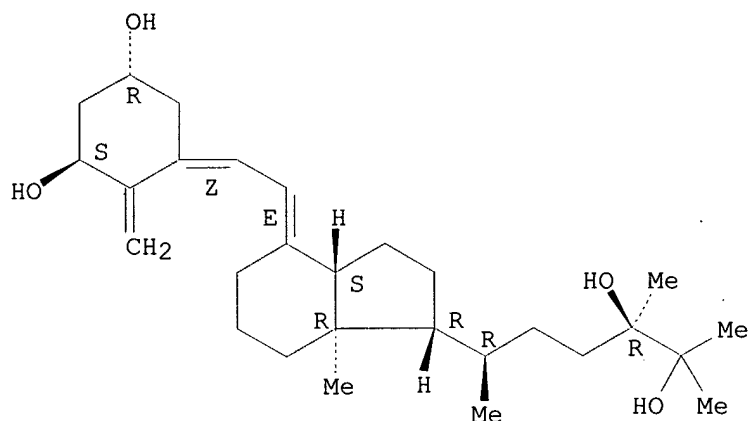


- IT Antitumor agents  
(colon; vitamin D4 hydroxy derivs.for treating cancer and disorders of calcium metab., prepn., biol. activity, and pharmaceutical and cosmetic compns.)
- IT Cosmetics  
(creams; vitamin D4 hydroxy derivs.for treating cancer and disorders of calcium metab., prepn., biol. activity, and pharmaceutical and cosmetic compns.)
- IT Bone  
(d.; vitamin D4 hydroxy derivs.for treating cancer and disorders of calcium metab., prepn., biol. activity, and pharmaceutical and cosmetic compns.)
- IT Skin  
(keratinocyte; vitamin D4 hydroxy derivs.for treating cancer and disorders of calcium metab., prepn., biol. activity, and pharmaceutical and cosmetic compns.)
- IT Cosmetics  
Drug delivery systems  
(lotions; vitamin D4 hydroxy derivs.for treating cancer and disorders of calcium metab., prepn., biol. activity, and pharmaceutical and cosmetic compns.)
- IT Antitumor agents  
(mammary gland; vitamin D4 hydroxy derivs.for treating cancer and disorders of calcium metab., prepn., biol. activity, and pharmaceutical and cosmetic compns.)
- IT Mammary gland  
(neoplasm, inhibitors; vitamin D4 hydroxy derivs.for treating cancer and disorders of calcium metab., prepn., biol. activity, and pharmaceutical and cosmetic compns.)
- IT Drug delivery systems  
(ointments, creams, topical; vitamin D4 hydroxy derivs.for treating cancer and disorders of calcium metab., prepn., biol. activity, and pharmaceutical and cosmetic compns.)
- IT Drug delivery systems  
(ointments; vitamin D4 hydroxy derivs.for treating cancer and disorders of calcium metab., prepn., biol. activity, and pharmaceutical and cosmetic compns.)
- IT Drug delivery systems  
(oral; vitamin D4 hydroxy derivs.for treating cancer and disorders of calcium metab., prepn., biol. activity, and pharmaceutical and cosmetic compns.)
- IT Drug delivery systems  
(topical; vitamin D4 hydroxy derivs.for treating cancer and disorders of calcium metab., prepn., biol. activity, and pharmaceutical and cosmetic compns.)
- IT Antitumor agents  
Cell differentiation  
Cell proliferation  
Cosmetics  
Drug delivery systems  
Osteoporosis  
Psoriasis  
(vitamin D4 hydroxy derivs.for treating cancer and disorders of calcium metab., prepn., biol. activity, and pharmaceutical and cosmetic compns.)
- IT Osteocalcins  
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)  
(vitamin D4 hydroxy derivs.for treating cancer and disorders of calcium metab., prepn., biol. activity, and pharmaceutical and cosmetic compns.)
- IT Vitamin D receptors  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

- (Biological study); PROC (Process)  
 (vitamin D4 hydroxy derivs.for treating cancer and disorders of calcium metab., prepn., biol. activity, and pharmaceutical and cosmetic compns.)
- IT 511-28-4P, Vitamin D4 516-79-0P, 22,23-Dihydroergosterol 2418-45-3P, Ergosterol acetate 2579-14-8P 58261-88-4P 59969-08-3P 60045-90-1P 143032-83-1P, Vitamin D4 tosylate 186489-59-8P 186489-60-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. and reaction; vitamin D4 hydroxy derivs.for treating cancer and disorders of calcium metab., prepn., biol. activity, and pharmaceutical and cosmetic compns.)
- IT 57-87-4, Ergosterol  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction; vitamin D4 hydroxy derivs.for treating cancer and disorders of calcium metab., prepn., biol. activity, and pharmaceutical and cosmetic compns.)
- IT 7440-70-2, Calcium, biological studies  
 RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)  
 (vitamin D4 hydroxy deriv. in increase in serum calcium in vitamin D-deficient rats)
- IT 1406-16-2, Vitamin D  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (vitamin D4 hydroxy deriv. in increase in serum calcium in vitamin D-deficient rats)
- IT 58-61-7, Adenosine, biological studies 58-74-2, Papaverine 11103-57-4, Vitamin A  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (vitamin D4 hydroxy derivs.for treating cancer and disorders of calcium metab., prepn., biol. activity, and combination pharmaceutical and cosmetic compns.)
- IT 83465-05-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (vitamin D4 hydroxy derivs.for treating cancer and disorders of calcium metab., prepn., biol. activity, and pharmaceutical and cosmetic compns.)
- IT 131249-38-2 143032-85-3 157893-62-4 **179189-36-7**  
**186489-58-7**  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (vitamin D4 hydroxy derivs.for treating cancer and disorders of calcium metab., prepn., biol. activity, and pharmaceutical and cosmetic compns.)
- IT **179189-36-7 186489-58-7**  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (vitamin D4 hydroxy derivs.for treating cancer and disorders of calcium metab., prepn., biol. activity, and pharmaceutical and cosmetic compns.)
- RN 179189-36-7 HCAPLUS  
 CN 9,10-Secoergosta-5,7,10(19)-triene-1,3,24,25-tetrol,  
 (1.alpha.,3.beta.,5Z,7E)- (9CI) (CA INDEX NAME)

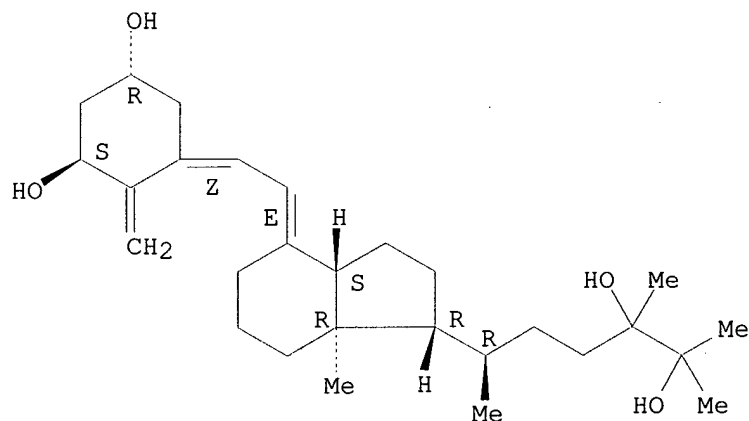
Absolute stereochemistry.

Double bond geometry as shown.



RN 186489-58-7 HCAPLUS  
 CN 9,10-Secoergosta-5,7,10(19)-triene-1,3,24,25-tetrol,  
 (1.alpha.,3.beta.,5Z,7E,24.xi.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.

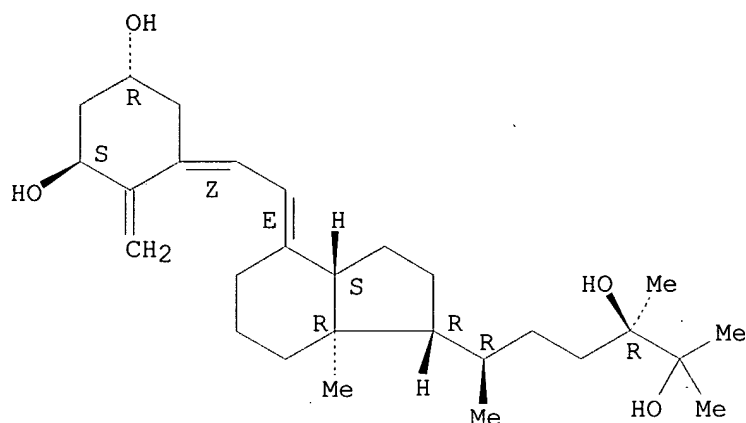


L22 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2003 ACS on STN  
 AN 1996:447075 HCAPLUS  
 DN 125:123721  
 TI Oral 1.alpha.-hydroxyprevitamin D  
 IN Knutson, Joyce C.; Valliere, Charles R.; Bishop, Charles W.  
 PA Lunar Corp., USA  
 SO U.S., 12 pp., Cont.-in-part of U.S. Ser. No. 901,886, abandoned.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC ICM A01N045-00  
 NCL 514170000  
 CC 63-6 (Pharmaceuticals)  
 Section cross-reference(s): 1  
 FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5529991	A	19960625	US 1994-196116	19940222
	ES 2170069	T3	20020801	ES 1993-916684	19930622
	US 5622941	A	19970422	US 1994-188942	19940126

	US 5614513	A	19970325	US 1995-485354	19950607
	US 6147064	A	20001114	US 1995-476420	19950607
	US 6150346	A	20001121	US 1995-474757	19950607
	AU 9660608	A1	19961003	AU 1996-60608	19960722
	AU 696402	B2	19980910		
	US 6133250	A	20001017	US 1996-700798	19960821
	US 5795882	A	19980818	US 1996-775447	19961230
PRAI	US 1992-901886	B2	19920622		
	US 1994-188942	A3	19940126		
	US 1994-196116	A3	19940222		
	US 1995-485354	A2	19950607		
OS	MARPAT 125:123721				
AB	An enteric-coated sustained-release oral dosage form for vitamin D for treatment of osteoporosis and psoriasis and prevention of hypocalcemia and bone loss in hemodialysis is claimed. The compn. comprises a matrix contg. an activated vitamin D or 1.alpha.-hydroxy vitamin D coated with cellulose acetate phthalate or an acrylic polymer of Eudragit type.				
ST	vitamin D oral enteric sustained release				
IT	Osteoporosis				
	Psoriasis				
	(treatment of; enteric-coated sustained-release oral dosage forms for vitamin D)				
IT	Pharmaceutical dosage forms				
	(enteric-coated, sustained-release, oral; enteric-coated sustained-release oral dosage forms for vitamin D)				
IT	57-11-4, Octadecanoic acid, biological studies 1406-16-2, Vitamin D 9004-38-0, Cellulose acetate phthalate 25086-15-1, Eudragit L100 32222-06-3, 1.alpha.,25-Dihydroxy cholecalciferol 33434-24-1, Eudragit RS100 41294-56-8, 1.alpha.-Hydroxy cholecalciferol 41461-13-6, 1.alpha.-Hydroxy precholecalciferol 54573-75-0, 1.alpha.-Hydroxy ergocalciferol 57102-09-7, 1.alpha.,25-Dihydroxy precholecalciferol 60133-18-8, 1.alpha.,25-Dihydroxy ergocalciferol 60965-80-2, 1.alpha.,24-Dihydroxy cholecalciferol 64164-40-5, 1.alpha.-Hydroxy-25-fluoro cholecalciferol 64419-01-8 72203-93-1, 1.alpha.,24,25-Trihydroxy cholecalciferol 73030-57-6 74041-05-7 76704-93-3, 1.alpha.,24-Dihydroxy-25-fluoro cholecalciferol 95660-30-3, Eudragit S90 100496-04-6 125732-36-7 127264-16-8, 1.alpha.,24,25-Trihydroxy precholecalciferol 127264-17-9 127264-18-0 131249-38-2, 1.alpha.,25-Dihydroxy vitamin D4 143032-85-3, 1.alpha.-Hydroxy vitamin D4 151136-06-0 153210-43-6, 1.alpha.,25-Dihydroxy previtamin D4 156316-85-7 157893-62-4 179189-32-3 179189-33-4 179189-34-5 179189-35-6 <b>179189-36-7</b> 179189-37-8 179189-38-9 182374-18-1				
	RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)				
	(enteric-coated sustained-release oral dosage forms for vitamin D)				
IT	7440-70-2, Calcium, biological studies				
	RL: BSU (Biological study, unclassified); BIOL (Biological study)				
	(metabolic disorders, treatment of; enteric-coated sustained-release oral dosage forms for vitamin D)				
IT	<b>179189-36-7</b>				
	RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)				
	(enteric-coated sustained-release oral dosage forms for vitamin D)				
RN	179189-36-7 HCAPLUS				
CN	9,10-Secoergosta-5,7,10(19)-triene-1,3,24,25-tetrol, (1.alpha.,3.beta.,5Z,7E)- (9CI) (CA INDEX NAME)				

Absolute stereochemistry.  
Double bond geometry as shown.



=> fil uspatall

FILE 'USPATFULL' ENTERED AT 14:48:13 ON 17 AUG 2003

CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 14:48:13 ON 17 AUG 2003

CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

=> s 120

L23 10 L20

=> d bib abs hitstr tot

L23 ANSWER 1 OF 10 USPATFULL on STN

AN 2003:67760 USPATFULL

TI Vitamin D, derivatives and remedies for inflammatory respiratory diseases containing the same

IN Takenouchi, Kazuya, Tokyo, JAPAN

Gao, Qingzhi, Tokyo, JAPAN

Manabe, Kenji, Tokyo, JAPAN

Sogawa, Ryo, Tokyo, JAPAN

Takano, Yasuhiro, Tokyo, JAPAN

Ishizuka, Seiichi, Tokyo, JAPAN

PA Teijin Limited, Osaka, JAPAN (non-U.S. corporation)

PI US 6531460 B1 20030311

WO 2000024712 20000504

AI US 2001-830167 20010423 (9)

WO 1999-JP5826 19991022

PRAI JP 1998-302321 19981023

JP 1998-362827 19981221

JP 1998-365207 19981222

JP 1998-365208 19981222

JP 1998-365209 19981222

DT Utility

FS GRANTED

EXNAM Primary Examiner: Qazi, Sabiha

LREP Sughrue Mion, PLLC

CLMN Number of Claims: 20

ECL Exemplary Claim: 1

DRWN 0 Drawing Figure(s); 0 Drawing Page(s)

LN.CNT 3903

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds expressed by the following general formula (1), ##STR1##  
##STR2##

The compounds can be used as active ingredients of treating agents for inflammatory respiratory diseases, malignant tumors, rheumatoid arthritis, osteoporosis, diabetes mellitus, hypertension; alopecia, acne, psoriasis, dermatitis, hypercalcemia, hypoparathyroidism and metabolic disorder of cartilage.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 266344-71-2P 266344-72-3P 266344-76-7P

266344-78-9P 266344-80-3P

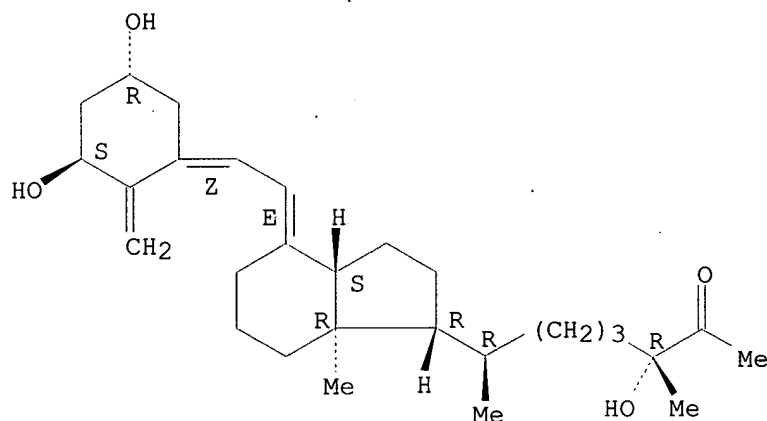
(prepn. of vitamin D3 derivs. as remedies for inflammatory respiratory diseases and other diseases)

RN 266344-71-2 USPATFULL

CN Ethanone, 1-[(1.alpha.,3.beta.,5Z,7E,25R)-1,3,25-trihydroxy-27-nor-9,10-secocholesta-5,7,10(19)-trien-25-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

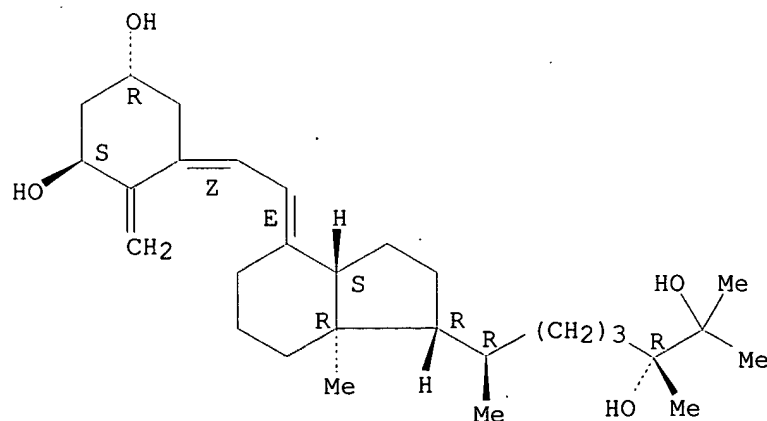


RN 266344-72-3 USPATFULL

CN 27-Nor-9,10-secocholesta-5,7,10(19)-triene-1,3,25-triol, 25-(1-hydroxy-1-methylethyl)-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

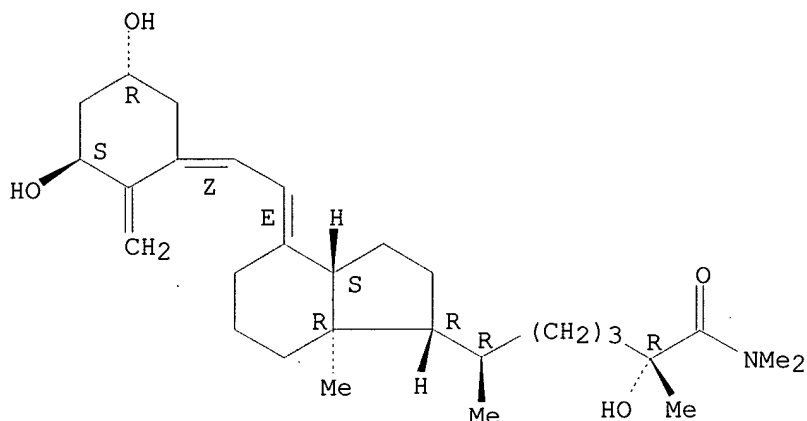


RN 266344-76-7 USPATFULL

CN 9,10-Secocholesta-5,7,10(19)-trien-26-amide, 1,3,25-trihydroxy-N,N-

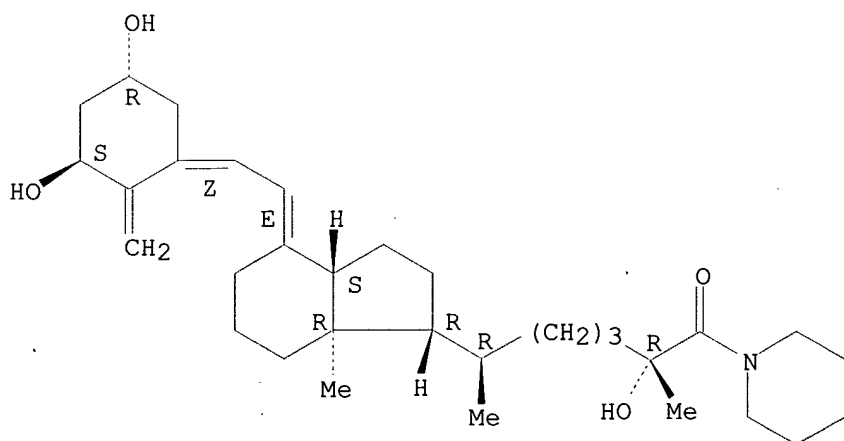
dimethyl-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



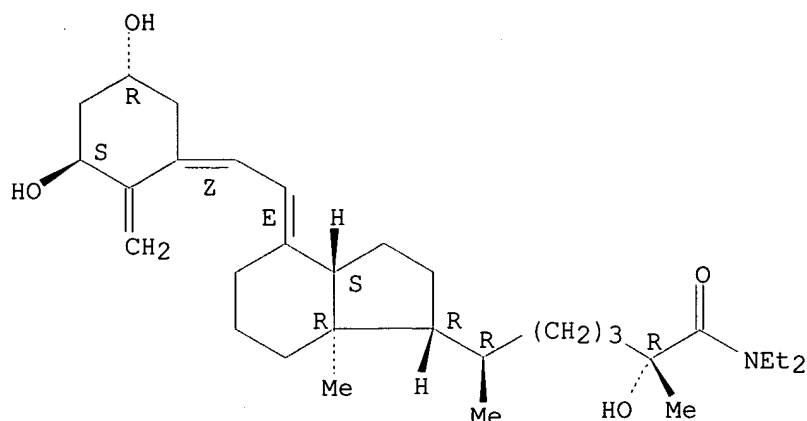
RN 266344-78-9 USPATFULL  
CN Piperidine, 1-[(1.alpha.,3.beta.,5Z,7E,25R)-1,3,25-trihydroxy-26-oxo-9,10-secocholesta-5,7,10(19)-trien-26-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



RN 266344-80-3 USPATFULL  
CN 9,10-Secocholesta-5,7,10(19)-trien-26-amide, N,N-diethyl-1,3,25-trihydroxy-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA INDEX NAME)

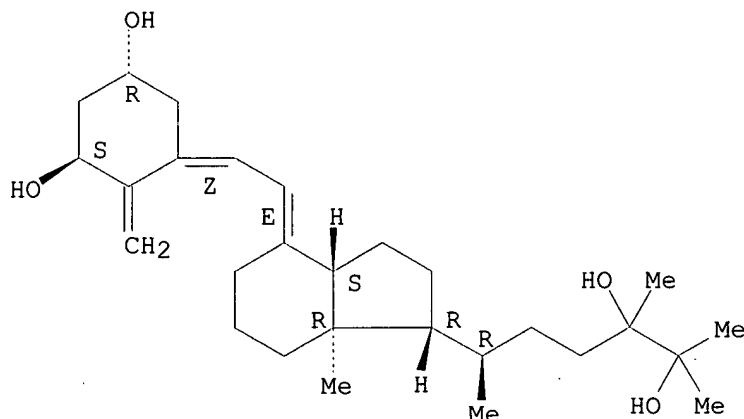
Absolute stereochemistry.  
Double bond geometry as shown.



L23 ANSWER 2 OF 10 USPATFULL on STN  
 AN 2002:323122 USPATFULL  
 TI Method for treating and preventing hyperparathyroidism  
 IN Mazess, Richard B., Madison, WI, UNITED STATES  
 Strugnell, Stephen A., Madison, WI, UNITED STATES  
 Knutson, Joyce C., Madison, WI, UNITED STATES  
 PA Bone Care International, Inc., Middleton, WI (U.S. corporation)  
 PI US 2002183288 A1 20021205  
 AI US 2002-127005 A1 20020419 (10)  
 RLI Continuation-in-part of Ser. No. US 2000-501093, filed on 9 Feb 2000,  
 GRANTED, Pat. No. US 6376479 Continuation-in-part of Ser. No. US  
 1998-86969, filed on 29 May 1998, GRANTED, Pat. No. US 6242434  
 Continuation-in-part of Ser. No. US 1997-907659, filed on 8 Aug 1997,  
 GRANTED, Pat. No. US 5869473 Continuation-in-part of Ser. No. US  
 1997-907660, filed on 8 Aug 1997, ABANDONED Division of Ser. No. US  
 1997-798958, filed on 11 Feb 1997, GRANTED, Pat. No. US 5707980  
 Continuation of Ser. No. US 1995-415488, filed on 3 Apr 1995, GRANTED,  
 Pat. No. US 5602116  
 DT Utility  
 FS APPLICATION  
 LREP MICHAEL BEST & FRIEDRICH, LLP, ONE SOUTH PINCKNEY STREET, P O BOX 1806,  
 MADISON, WI, 53701  
 CLMN Number of Claims: 39  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 1590  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB This invention relates to a method for treating or preventing  
 hyperthyroidism associated with aging and/or with Aging-Related Vitamin  
 D Deficiency (ARVDD) syndrome by administering a sufficient amount of an  
 active vitamin D compound utilizing a variety of effective treatment  
 protocols. The invention further relates to treating or preventing one  
 or more of the following conditions, e.g., (1) primary vitamin D  
 deficiency, (2) 1,25-(OH).sub.2D.sub.3 deficiency, and (3)  
 1,25-(OH).sub.2D.sub.3 resistance included within the syndrome of ARVDD.  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 IT 186489-58-7  
 (active vitamin D compds. for treating and preventing  
 hyperparathyroidism assocd. with aging)  
 RN 186489-58-7 USPATFULL  
 CN 9,10-Secoergosta-5,7,10(19)-triene-1,3,24,25-tetrol,  
 (1.alpha.,3.beta.,5Z,7E,24.xi.)- (9CI) (CA INDEX NAME)



Absolute stereochemistry.  
Double bond geometry as shown.



L23 ANSWER 3 OF 10 USPATFULL on STN  
 AN 2002:243608 USPATFULL  
 TI Vitamin D3 dervative and treating agent for inflammatory respiratory  
 disease using same  
 IN Takenouchi, Kazuya, Tokyo, JAPAN  
 Gao, Qingzhi, Tokyo, JAPAN  
 Manabe, Kenji, Tokyo, JAPAN  
 Sogawa, Ryo, Tokyo, JAPAN  
 Takano, Yasuhiro, Tokyo, JAPAN  
 Ishizuka, Seiichi, Tokyo, JAPAN  
 PA TEIJIN LIMITED (non-U.S. corporation)  
 PI US 2002132799 A1 20020919  
 AI US 2002-35251 A1 20020104 (10)  
 RLI Division of Ser. No. US 2001-830167, filed on 23 Apr 2001, PENDING  
 PRAI JP 1998-302321 19981023  
 JP 1998-362827 19981221  
 JP 1998-365207 19981222  
 JP 1998-365208 19981222  
 JP 1998-365209 19981222  
 DT Utility  
 FS APPLICATION  
 LREP SUGHRUE MION, PLLC, 2100 Pensylvania Avenue, NW, Washington, DC,  
 20037-3213  
 CLMN Number of Claims: 44  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 4222  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB Compounds expressed by the following general formula (1), ##STR1##

[wherein, R.sub.01 and R.sub.02 are each independently a hydrogen atom  
 or a protecting group for a hydroxyl group; Z is one out of the  
 following formulae (1-1), (1-2), (1-3), (1-4) and (1-5)]. ##STR2##

The compounds can be used as active ingredients of treating agents for  
 inflammatory respiratory diseases, malignant tumors, rheumatoid  
 arthritis, osteoporosis, diabetes mellitus, hypertension, alopecia,  
 acne, psoriasis, dermatitis, hypercalcemia, hypoparathyroidism and  
 metabolic disorder of cartilage.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 IT 266344-71-2P 266344-72-3P 266344-76-7P

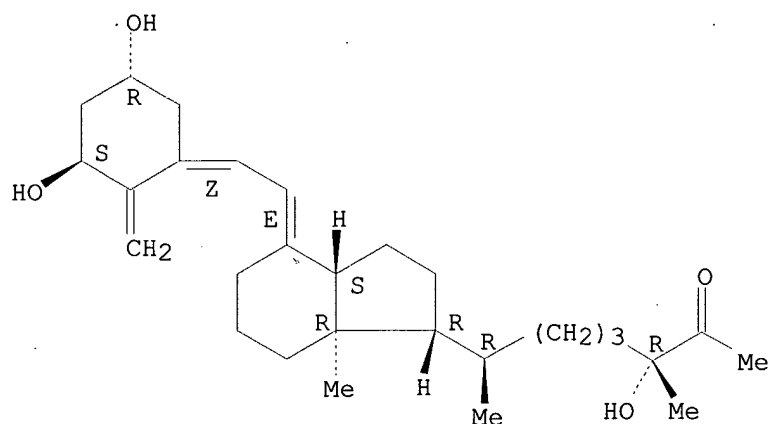
**266344-78-9P 266344-80-3P**

(prepn. of vitamin D3 derivs. as remedies for inflammatory respiratory diseases and other diseases)

RN 266344-71-2 USPATFULL

CN Ethanone, 1-[(1.alpha.,3.beta.,5Z,7E,25R)-1,3,25-trihydroxy-27-nor-9,10-secocholesta-5,7,10(19)-trien-25-yl]- (9CI) (CA INDEX NAME)

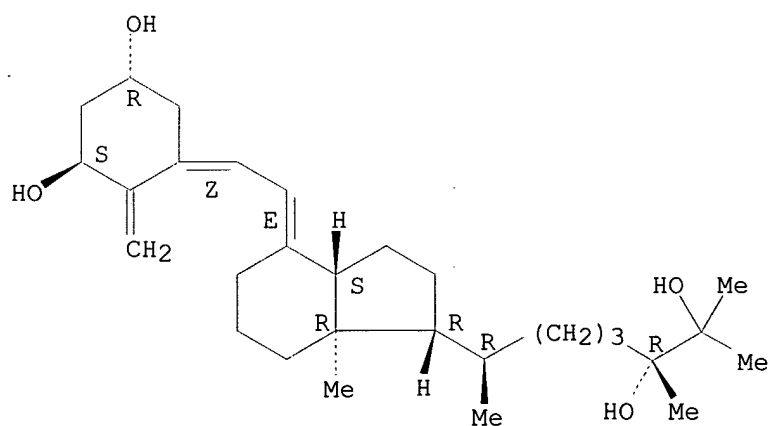
Absolute stereochemistry.  
Double bond geometry as shown.



RN 266344-72-3 USPATFULL

CN 27-Nor-9,10-secocholesta-5,7,10(19)-triene-1,3,25-triol, 25-(1-hydroxy-1-methylethyl)-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA INDEX NAME)

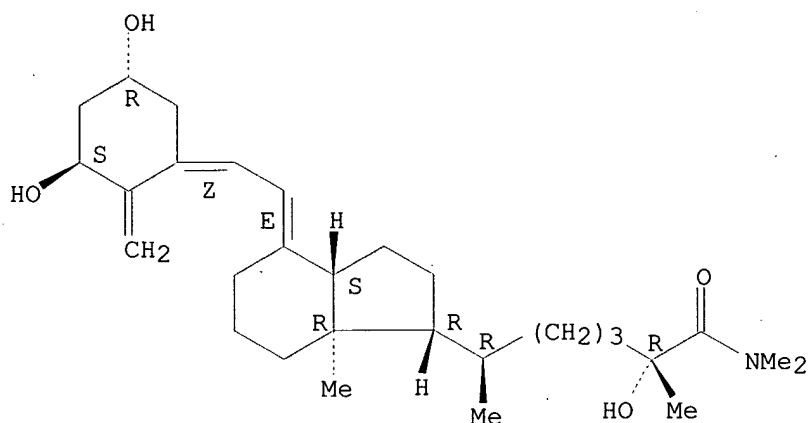
Absolute stereochemistry.  
Double bond geometry as shown.



RN 266344-76-7 USPATFULL

CN 9,10-Secocholesta-5,7,10(19)-trien-26-amide, 1,3,25-trihydroxy-N,N-dimethyl-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA INDEX NAME)

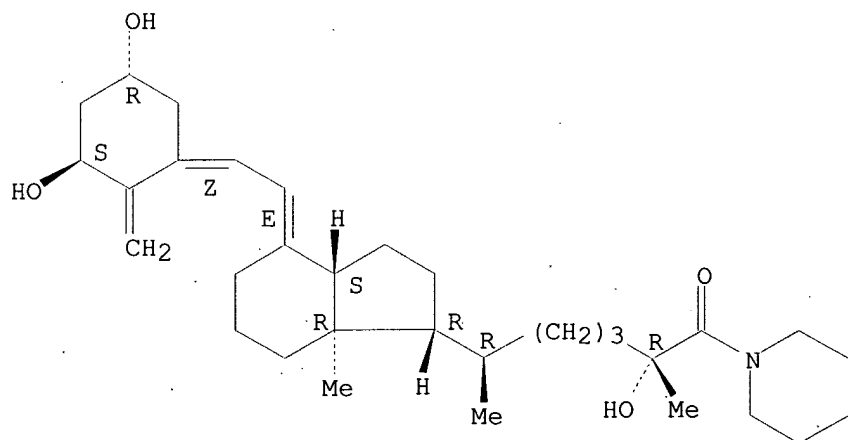
Absolute stereochemistry.  
Double bond geometry as shown.



RN 266344-78-9 USPATFULL

CN Piperidine, 1-[(1.alpha.,3.beta.,5Z,7E,25R)-1,3,25-trihydroxy-26-oxo-9,10-secocholesta-5,7,10(19)-trien-26-yl]- (9CI) (CA INDEX NAME)

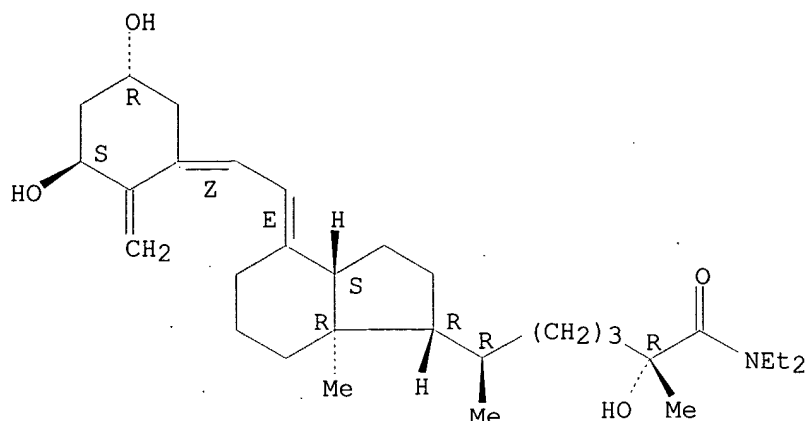
Absolute stereochemistry.  
Double bond geometry as shown.



RN 266344-80-3 USPATFULL

CN 9,10-Secocholesta-5,7,10(19)-trien-26-amide, N,N-diethyl-1,3,25-trihydroxy-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



L23 ANSWER 4 OF 10 USPATFULL on STN

AN 2002:236042 USPATFULL

TI Treatment of hyperproliferative diseases using active vitamin D analogues

IN Mazess, Richard B., Madison, WI, UNITED STATES

PA Bone Care International, Inc., Middleton, WI (U.S. corporation)

PI US 2002128240 A1 20020912

AI US 2001-995911 A1 20011128 (9)

RLI Continuation-in-part of Ser. No. US 2001-891814, filed on 26 Jun 2001, PENDING Continuation-in-part of Ser. No. US 1998-596149, filed on 23 Feb 1998, PENDING Division of Ser. No. US 1996-781910, filed on 30 Dec 1996, PATENTED

DT Utility

FS APPLICATION

LREP MICHAEL BEST & FRIEDRICH, LLP, ONE SOUTH PINCKNEY STREET, P O BOX 1806, MADISON, WI, 53701

CLMN Number of Claims: 41

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1385

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a method of inhibiting the hyperproliferative cellular activity of neoplasms and other hyperproliferative diseases with an active vitamin D compound utilizing a high dose, episodic treatment protocol.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **186489-58-7**

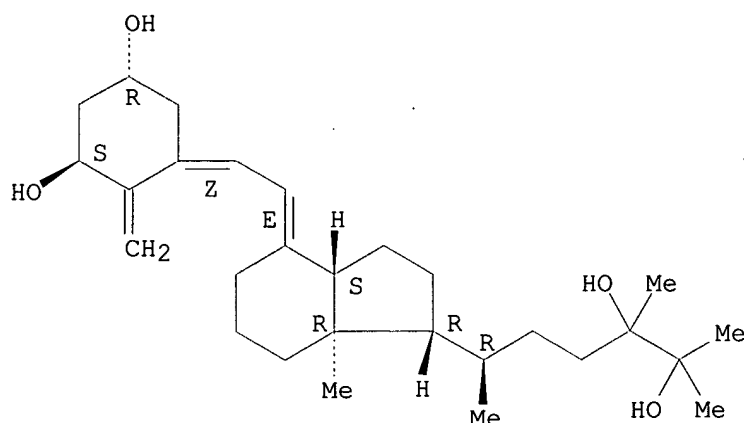
(treatment of hyperproliferative diseases using active vitamin D analogs)

RN 186489-58-7 USPATFULL

CN 9,10-Secoergosta-5,7,10(19)-triene-1,3,24,25-tetrol, (1.alpha.,3.beta.,5Z,7E,24.xi.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L23 ANSWER 5 OF 10 USPATFULL on STN  
 AN 2002:192102 USPATFULL  
 TI Vitamin D3 derivative and treating agent for inflammatory respiratory disease using same  
 IN Takenouchi, Kazuya, Tokyo, JAPAN  
 Gao, Qingzhi, Tokyo, JAPAN  
 Manabe, Kenji, Tokyo, JAPAN  
 Sogawa, Ryo, Tokyo, JAPAN  
 Takano, Yasuhiro, Tokyo, JAPAN  
 Ishizuka, Seiichi, Tokyo, JAPAN  
 PA TEIJIN LIMITED (non-U.S. corporation)  
 PI US 2002103173 A1 20020801  
 AI US 2002-35217 A1 20020104 (10)  
 RLI Division of Ser. No. US 2001-830167, filed on 23 Apr 2001, PENDING  
 PRAI JP 1998-302321 19981023  
 JP 1998-362827 19981221  
 JP 1998-365207 19981222  
 JP 1998-365208 19981222  
 JP 1998-365209 19981222  
 DT Utility  
 FS APPLICATION  
 LREP SUGHRUE, MION, ZINN,, MACPEAK & SEAS, PLLC, Suite 800, 2100 Pennsylvania Avenue, N.W., Washington, DC, 20037-3213  
 CLMN Number of Claims: 44  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 4284  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB Compounds expressed by the following general formula (1), ##STR1##

[wherein, R.sub.01 and R.sub.02 are each independently a hydrogen atom or a protecting group for a hydroxyl group; Z is one out of the following formulae (1-1), (1-2), (1-3), (1-4) and (1-5)]. ##STR2##

The compounds can be used as active ingredients of treating agents for inflammatory respiratory diseases, malignant tumors, rheumatoid arthritis, osteoporosis, diabetes mellitus, hypertension, alopecia, acne, psoriasis, dermatitis, hypercalcemia, hypoparathyroidism and metabolic disorder of cartilage.

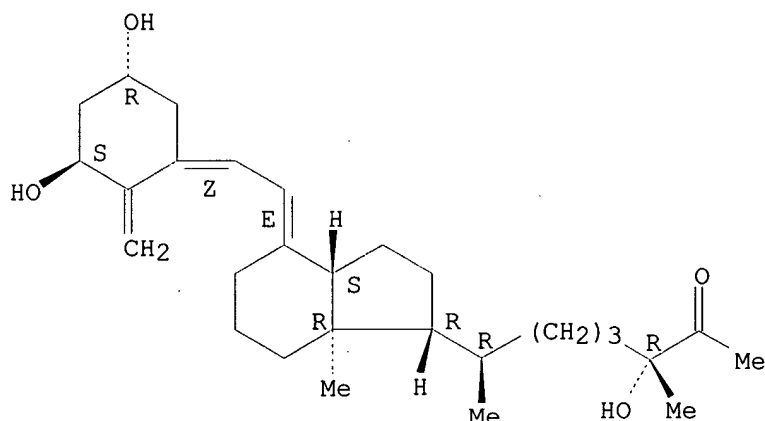
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 IT 266344-71-2P 266344-72-3P 266344-76-7P  
 266344-78-9P 266344-80-3P  
 (prepn. of vitamin D3 derivs. as remedies for inflammatory respiratory

diseases and other diseases)

RN 266344-71-2 USPATFULL

CN Ethanone, 1-[(1.alpha.,3.beta.,5Z,7E,25R)-1,3,25-trihydroxy-27-nor-9,10-secocholesta-5,7,10(19)-trien-25-yl]- (9CI) (CA INDEX NAME)

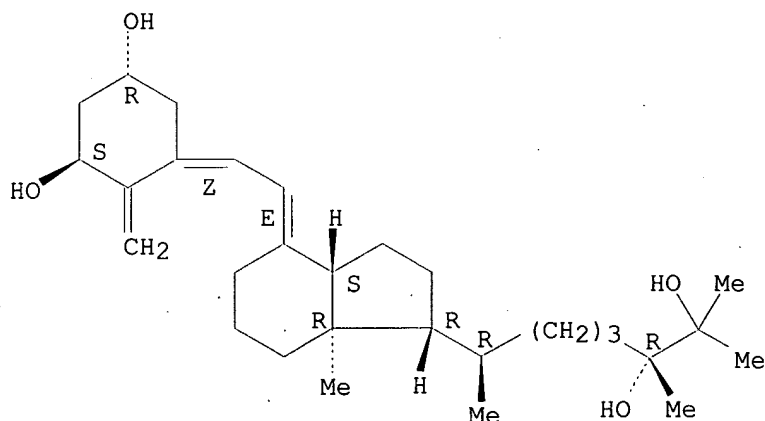
Absolute stereochemistry.  
Double bond geometry as shown.



RN 266344-72-3 USPATFULL

CN 27-Nor-9,10-secocholesta-5,7,10(19)-triene-1,3,25-triol, 25-(1-hydroxy-1-methylethyl)-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA INDEX NAME)

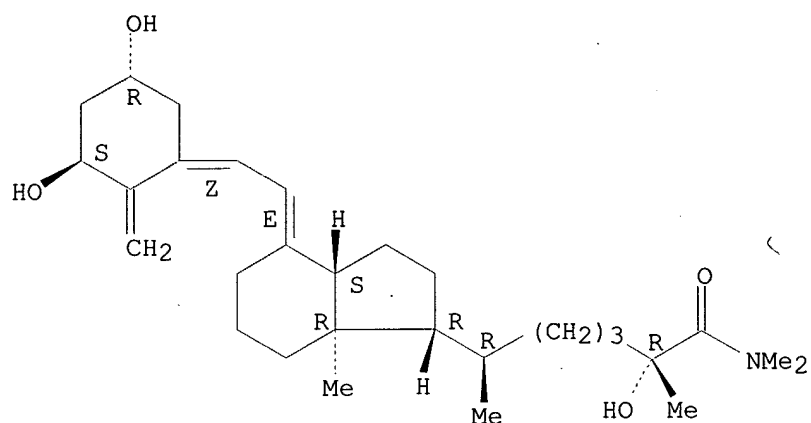
Absolute stereochemistry.  
Double bond geometry as shown.



RN 266344-76-7 USPATFULL

CN 9,10-Secocholesta-5,7,10(19)-trien-26-amide, 1,3,25-trihydroxy-N,N-dimethyl-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA INDEX NAME)

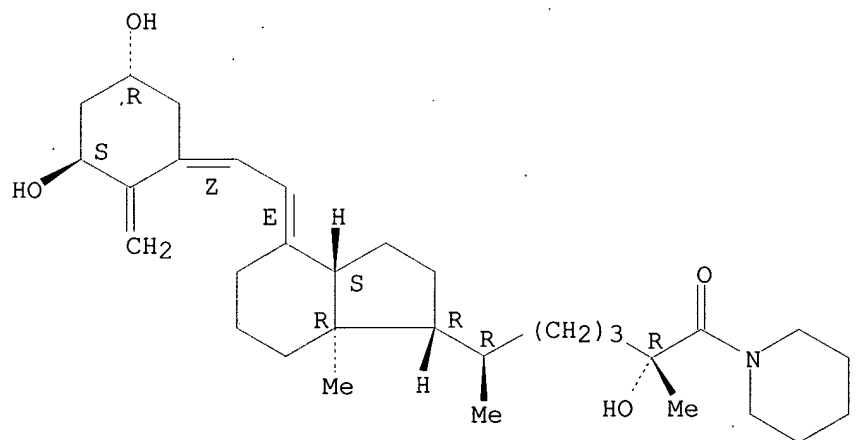
Absolute stereochemistry.  
Double bond geometry as shown.



RN 266344-78-9 USPATEFULL

CN Piperidine, 1-[(1.alpha.,3.beta.,5Z,7E,25R)-1,3,25-trihydroxy-26-oxo-9,10-secocholesta-5,7,10(19)-trien-26-yl]- (9CI) (CA INDEX NAME)

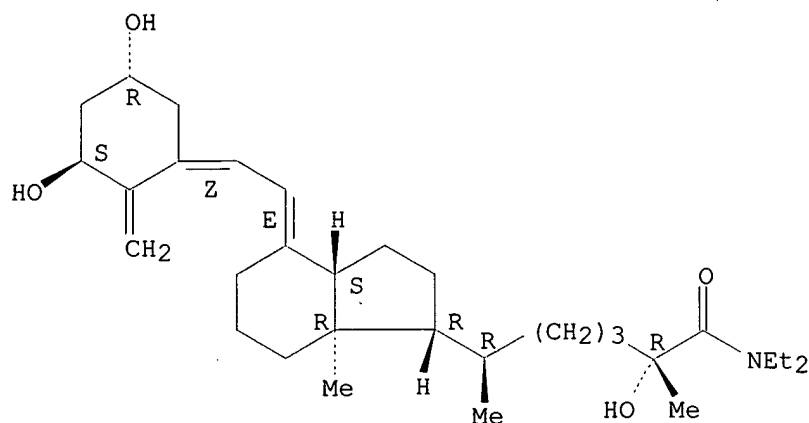
Absolute stereochemistry.  
Double bond geometry as shown.



RN 266344-80-3 USPATEFULL

CN 9,10-Secocholesta-5,7,10(19)-trien-26-amide, N,N-diethyl-1,3,25-trihydroxy-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



L23 ANSWER 6 OF 10 USPATFULL on STN  
 AN 2002:186118 USPATFULL  
 TI Vitamin D3 derivative and treating agent for inflammatory respiratory disease using same  
 IN Takenouchi, Kazuya, Tokyo, JAPAN  
 Gao, Qingzhi, Tokyo, JAPAN  
 Manabe, Kenji, Tokyo, JAPAN  
 Sogawa, Ryo, Tokyo, JAPAN  
 Takano, Yasuhiro, Tokyo, JAPAN  
 Ishizuka, Seiichi, Tokyo, JAPAN  
 PA TEIJIN LIMITED (non-U.S. corporation)  
 PI US 2002099039 A1 20020725  
 AI US 2002-35211 A1 20020104 (10)  
 RLI Division of Ser. No. US 2001-830167, filed on 23 Apr 2001, PENDING  
 PRAI JP 1998-302321 19981023  
 JP 1998-362827 19981221  
 JP 1998-365207 19981222  
 JP 1998-365208 19981222  
 JP 1998-365209 19981222  
 DT Utility  
 FS APPLICATION  
 LREP SUGHRUE MION, PLLC, 2100 Pennsylvania Avenue, NW, Washington, DC, 20037-3213  
 CLMN Number of Claims: 44  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 4241

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds expressed by the following general formula (1), ##STR1##

[wherein, R.sub.01 and R.sub.02 are each independently a hydrogen atom or a protecting group for a hydroxyl group; Z is one out of the following formulae (1-1), (1-2), (1-3), (1-4) and (1-5)]. ##STR2##

The compounds can be used as active ingredients of treating agents for inflammatory respiratory diseases, malignant tumors, rheumatoid arthritis, osteoporosis, diabetes mellitus, hypertension, alopecia, acne, psoriasis, dermatitis, hypercalcemia, hypoparathyroidism and metabolic disorder of cartilage.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 266344-71-2P 266344-72-3P 266344-76-7P

266344-78-9P 266344-80-3P

(prepn. of vitamin D3 derivs. as remedies for inflammatory respiratory



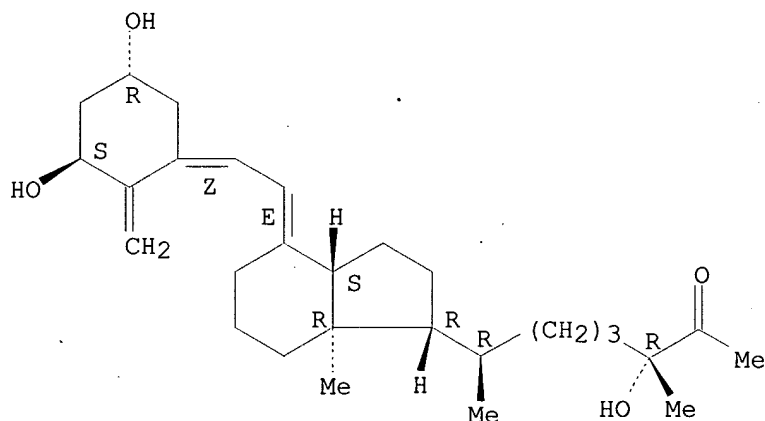
diseases and other diseases)

RN 266344-71-2 USPATFULL

CN      Ethanone, 1-[(1.alpha.,3.beta.,5Z,7E,25R)-1,3,25-trihydroxy-27-nor-9,10-secocholesta-5,7,10(19)-trien-25-yl]- (9CI)      (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

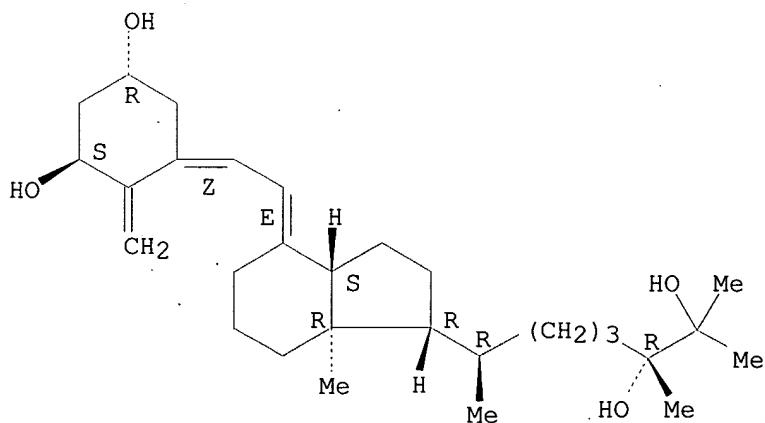


RN 266344-72-3 USPATFULL

CN 27-Nor-9,10-secocholesta-5,7,10(19)-triene-1,3,25-triol,  
25-(1-hydroxy-1-methylethyl)-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

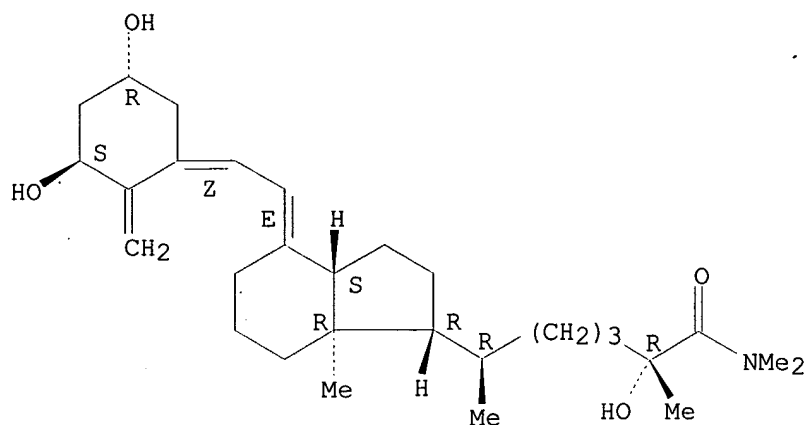


RN 266344-76-7 USPATFULL

CN 9,10-Secocholesta-5,7,10(19)-trien-26-amide, 1,3,25-trihydroxy-N,N-dimethyl-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

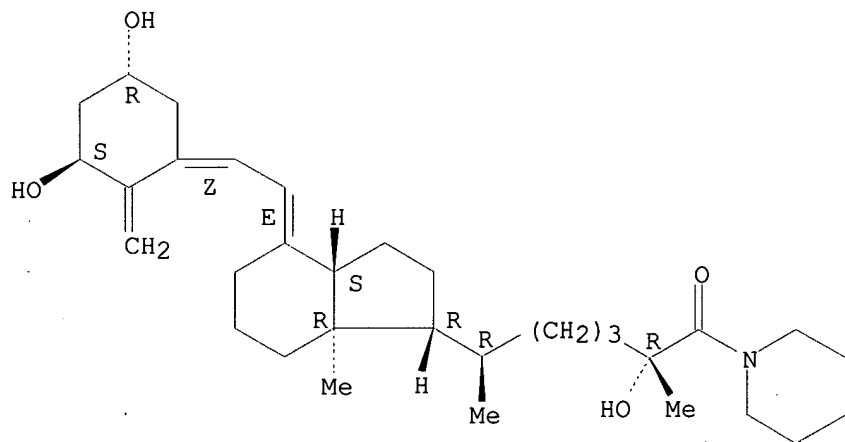
Double bond geometry as shown.



RN 266344-78-9 USPATFULL

CN Piperidine, 1-[(1.alpha.,3.beta.,5Z,7E,25R)-1,3,25-trihydroxy-26-oxo-9,10-secocholesta-5,7,10(19)-trien-26-yl]- (9CI) (CA INDEX NAME)

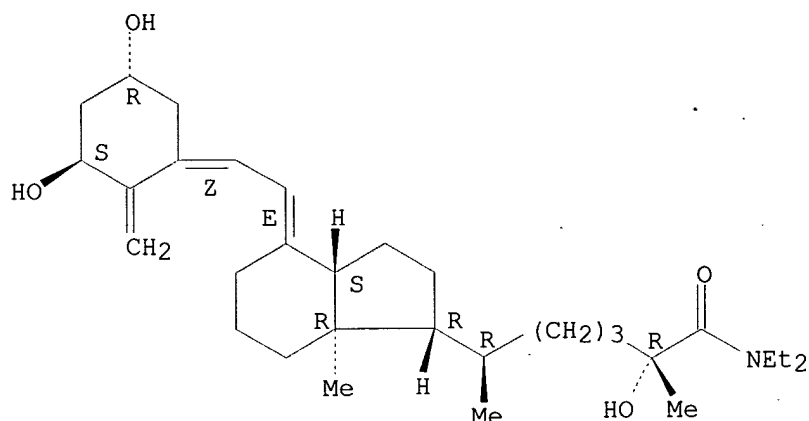
Absolute stereochemistry.  
Double bond geometry as shown.



RN 266344-80-3 USPATFULL

CN 9,10-Secocholesta-5,7,10(19)-trien-26-amide, N,N-diethyl-1,3,25-trihydroxy-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



L23 ANSWER 7 OF 10 USPATFULL on STN  
 AN 2002:172352 USPATFULL  
 TI Vitamin D3 derivative and treating agent for inflammatory respiratory disease using same  
 IN Takenouchi, Kazuya, Tokyo, JAPAN  
 Gao, Qingzhi, Tokyo, JAPAN  
 Manabe, Kenji, Tokyo, JAPAN  
 Sogawa, Ryo, Tokyo, JAPAN  
 Takano, Yasuhiro, Tokyo, JAPAN  
 Ishizuka, Seiichi, Tokyo, JAPAN  
 PA TEIJIN LIMITED (non-U.S. corporation)  
 PI US 2002091109 A1 20020711  
 US 6548489 B2 20030415  
 AI US 2002-35219 A1 20020104 (10)  
 RLI Division of Ser. No. US 2001-830167, filed on 23 Apr 2001, PENDING  
 PRAI JP 1998-302321 19981023  
 JP 1998-362827 19981221  
 JP 1998-365207 19981222  
 JP 1998-365208 19981222  
 JP 1998-365209 19981222  
 DT Utility  
 FS APPLICATION  
 LREP SUGHRUE MION, PLLC, 2100 Pennsylvania Avenue, NW, Washington, DC, 20037-3213  
 CLMN Number of Claims: 44  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 4194

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds expressed by the following general formula (1), ##STR1##

[wherein, R.sub.01 and R.sub.02 are each independently a hydrogen atom or a protecting group for a hydroxyl group; Z is one out of the following formulae (1-1), (1-2), (1-3), (1-4) and (1-5)]. ##STR2##

The compounds can be used as active ingredients of treating agents for inflammatory respiratory diseases, malignant tumors, rheumatoid arthritis, osteoporosis, diabetes mellitus, hypertension, alopecia, acne, psoriasis, dermatitis, hypercalcemia, hypoparathyroidism and metabolic disorder of cartilage.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

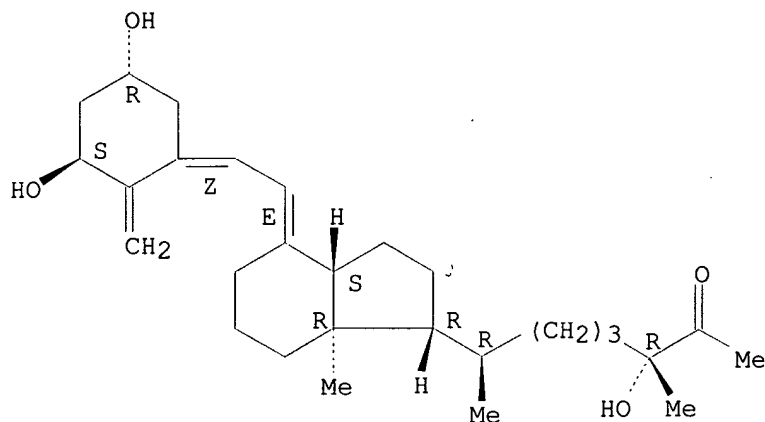
IT 266344-71-2P 266344-72-3P 266344-76-7P  
 266344-78-9P 266344-80-3P

(prepn. of vitamin D3 derivs. as remedies for inflammatory respiratory diseases and other diseases)

RN 266344-71-2 USPATFULL

CN Ethanone, 1-[(1.alpha.,3.beta.,5Z,7E,25R)-1,3,25-trihydroxy-27-nor-9,10-secocholesta-5,7,10(19)-trien-25-yl]- (9CI) (CA INDEX NAME)

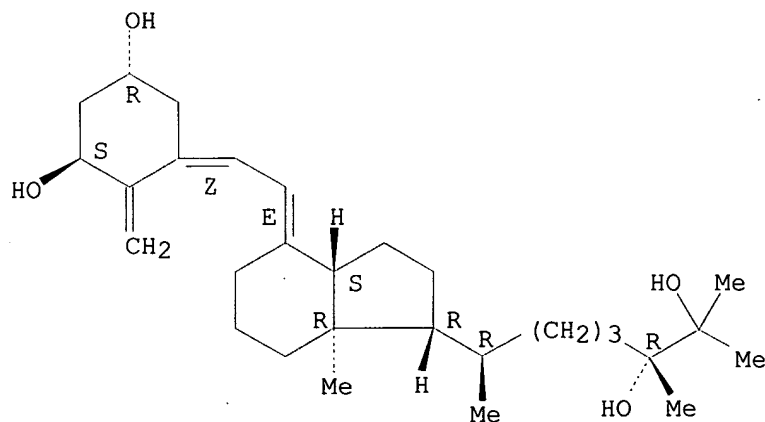
Absolute stereochemistry.  
Double bond geometry as shown.



RN 266344-72-3 USPATFULL

CN 27-Nor-9,10-secocholesta-5,7,10(19)-triene-1,3,25-triol, 25-(1-hydroxy-1-methylethyl)-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA INDEX NAME)

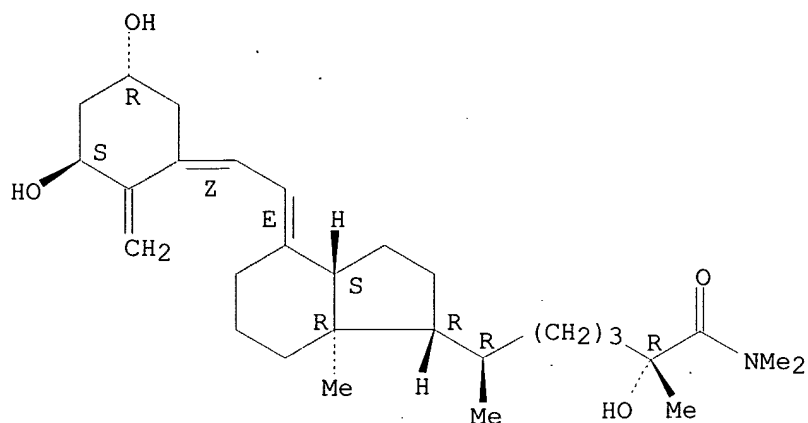
Absolute stereochemistry.  
Double bond geometry as shown.



RN 266344-76-7 USPATFULL

CN 9,10-Secocholesta-5,7,10(19)-trien-26-amide, 1,3,25-trihydroxy-N,N-dimethyl-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA INDEX NAME)

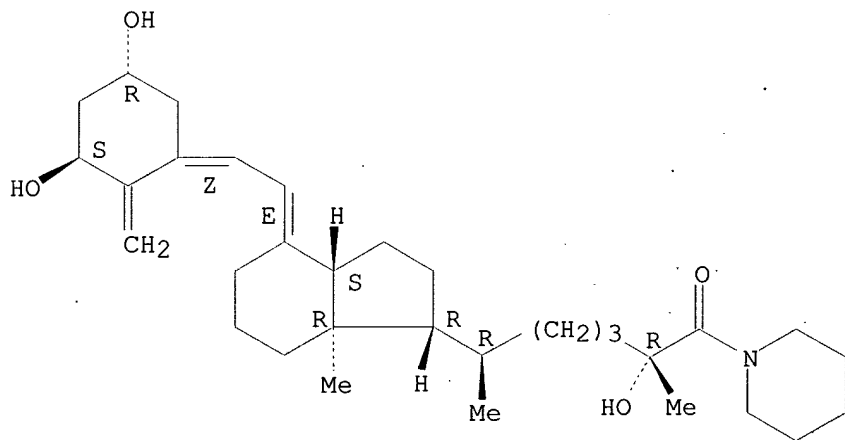
Absolute stereochemistry.  
Double bond geometry as shown.



RN 266344-78-9 USPATFULL

CN Piperidine, 1-[(1.alpha.,3.beta.,5Z,7E,25R)-1,3,25-trihydroxy-26-oxo-9,10-secocholesta-5,7,10(19)-trien-26-yl]- (9CI) (CA INDEX NAME)

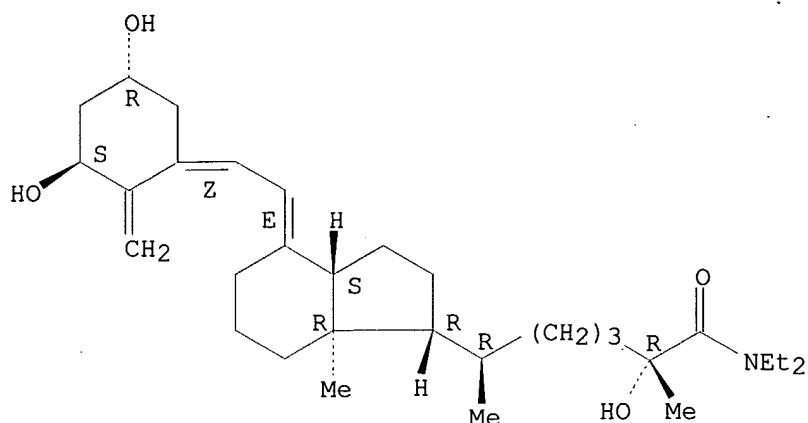
Absolute stereochemistry.  
Double bond geometry as shown.



RN 266344-80-3 USPATFULL

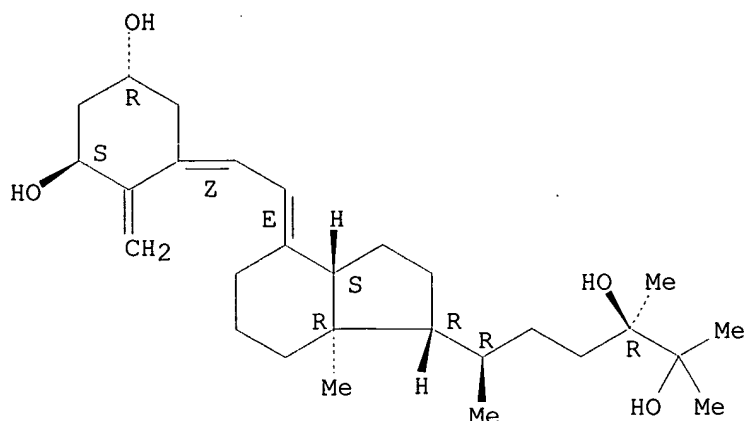
CN 9,10-Secocholesta-5,7,10(19)-trien-26-amide, N,N-diethyl-1,3,25-trihydroxy-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



L23 ANSWER 8 OF 10 USPATFULL on STN  
AN 1998:101636 USPATFULL  
TI Method of inhibiting the hyperproliferation of malignant cells  
IN Knutson, Joyce C., Madison, WI, United States  
Bishop, Charles W., Verona, WI, United States  
PA Bone Care International, Inc., Madison, WI, United States (U.S.  
corporation)  
PI US 5798345 19980825  
AI US 1995-486387 19950607 (8)  
RLI Continuation-in-part of Ser. No. US 1994-265438, filed on 24 Jun 1994  
which is a continuation of Ser. No. US 1992-886554, filed on 20 May  
1992, now abandoned which is a continuation-in-part of Ser. No. US  
1991-800045, filed on 29 Nov 1991, now abandoned which is a continuation  
of Ser. No. US 1990-586854, filed on 21 Sep 1990, now abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Robinson, Allen J.; Assistant Examiner: Badio, Barbara  
LREP. Welch, Teresa J.Stroud, Stroud, Willink, Thompson & Howard  
CLMN Number of Claims: 18  
ECL Exemplary Claim: 1  
DRWN 2 Drawing Figure(s); 2 Drawing Page(s)  
LN.CNT 1016  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB 1.alpha.-hydroxy vitamin D.sub.4 and analogues, preferably 1,24  
dihydroxy vitamin D.sub.4, which are useful as active compounds of  
pharmaceutical compositions for the inhibition of hyperproliferative  
activity of malignant cells.  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
IT 179189-36-7  
(hydroxy vitamin D4 and analogs for malignant cell hyperproliferation  
inhibition, pharmaceutical and cosmetic compns., and prepn. of  
5,6-cis-1.alpha.-hydroxy vitamin D4)  
RN 179189-36-7 USPATFULL  
CN 9,10-Secoergosta-5,7,10(19)-triene-1,3,24,25-tetrol,  
(1.alpha.,3.beta.,5Z,7E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



L23 ANSWER 9 OF 10 USPATFULL on STN

AN 96:55748 USPATFULL

TI Oral 1.alpha.-hydroxyprevitamin D

IN Knutson, Joyce C., Madison, WI, United States

Valliere, Charles R., Waunakee, WI, United States

Bishop, Charles W., Verona, WI, United States

PA Lunar Corporation, Madison, WI, United States (U.S. corporation)

PI US 5529991 19960625

AI US 1994-196116 19940222 (8)

RLI Continuation-in-part of Ser. No. US 1992-901886, filed on 22 Jun 1992,  
now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Killos, Paul J.

LREP Welch, Teresa J. Stroud, Stroud, Willink, Thompson & Howard

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1131

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to delayed and sustained release oral medicaments  
and, more specifically, to delayed and sustained release activated  
vitamin D, oral medicament.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 179189-36-7

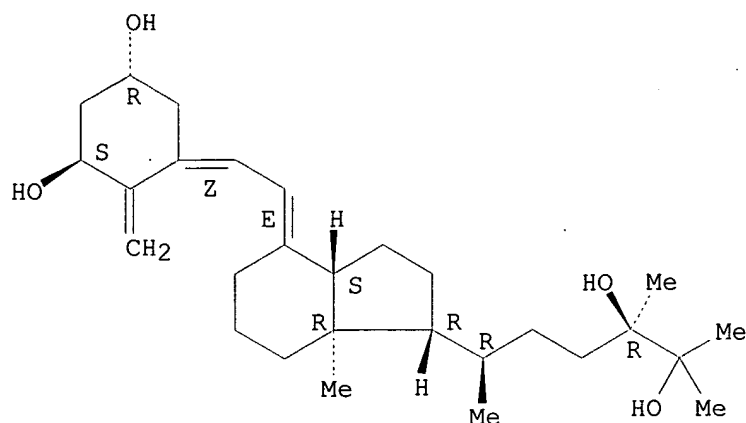
(enteric-coated sustained-release oral dosage forms for vitamin D)

RN 179189-36-7 USPATFULL

CN 9,10-Secoergosta-5,7,10(19)-triene-1,3,24,25-tetrol,  
(1.alpha.,3.beta.,5Z,7E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L23 ANSWER 10 OF 10 USPAT2 on STN  
 AN 2002:172352 USPAT2  
 TI Vitamin D3 derivative and treating agent for inflammatory respiratory disease using same  
 IN Takenouchi, Kazuya, Tokyo, JAPAN  
 Gao, Qingzhi, Tokyo, JAPAN  
 Manabe, Kenji, Tokyo, JAPAN  
 Sogawa, Ryo, Tokyo, JAPAN  
 Takano, Yasuhiro, Tokyo, JAPAN  
 Ishizuka, Seiichi, Tokyo, JAPAN  
 PA Teijin Limited, Osaka, JAPAN (non-U.S. corporation)  
 PI US 6548489 B2 20030415  
 AI US 2002-35219 20020104 (10)  
 RLI Division of Ser. No. US 830167  
 PRAI JP 1998-302321 19981023  
 JP 1998-362827 19981221  
 JP 1998-365207 19981222  
 JP 1998-365208 19981222  
 JP 1998-365209 19981222  
 DT Utility  
 FS GRANTED  
 EXNAM Primary Examiner: Qazi, Sabiha  
 LREP Sughrue Mion, PLLC  
 CLMN Number of Claims: 20  
 ECL Exemplary Claim: 1  
 DRWN 0 Drawing Figure(s); 0 Drawing Page(s)  
 LN.CNT 3845  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB Compounds expressed by the following general formula (1), ##STR1##

[wherein, R.sub.01 and R.sub.02 are each independently a hydrogen atom or a protecting group for a hydroxyl group; Z is one out of the following formulae (1-1) to (1-5)]. ##STR2##

The compounds can be used as active ingredients of treating agents for inflammatory respiratory diseases, malignant tumors, rheumatoid arthritis, osteoporosis, diabetes mellitus, hypertension, alopecia, acne, psoriasis, dermatitis, hypercalcemia, hypoparathyroidism and metabolic disorder of cartilage.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 IT 266344-71-2P 266344-72-3P 266344-76-7P  
 266344-78-9P 266344-80-3P  
 (prepn. of vitamin D3 derivs. as remedies for inflammatory respiratory

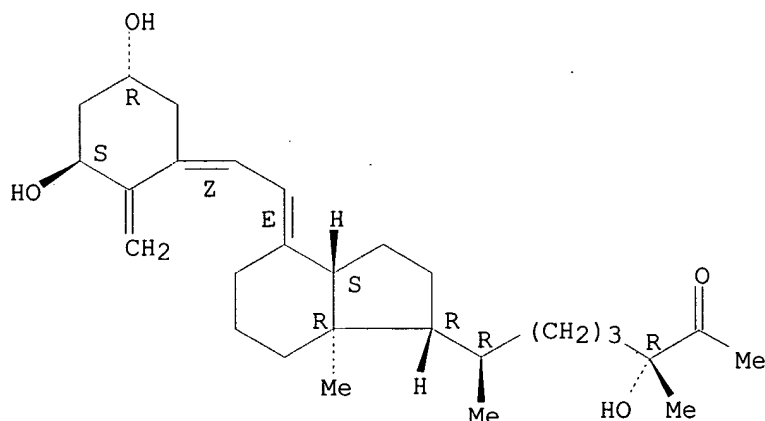


diseases and other diseases)

RN 266344-71-2 USPAT2

CN Ethanone, 1-[(1.alpha.,3.beta.,5Z,7E,25R)-1,3,25-trihydroxy-27-nor-9,10-secocholesta-5,7,10(19)-trien-25-yl]- (9CI) (CA INDEX NAME)

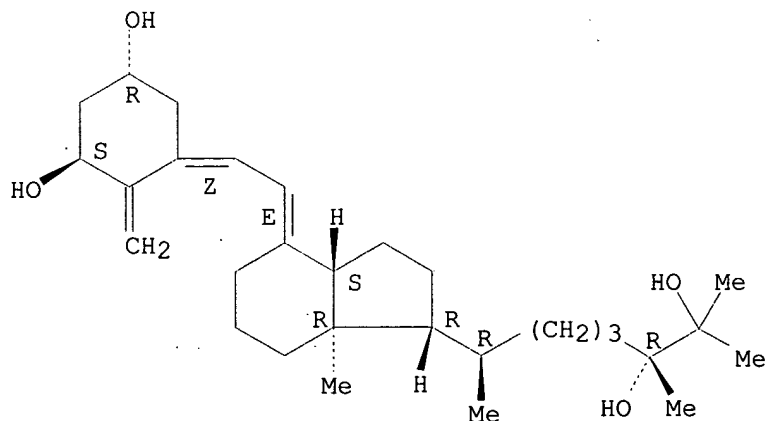
Absolute stereochemistry.  
Double bond geometry as shown.



RN 266344-72-3 USPAT2

CN 27-Nor-9,10-secocholesta-5,7,10(19)-triene-1,3,25-triol, 25-(1-hydroxy-1-methylethyl)-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA INDEX NAME)

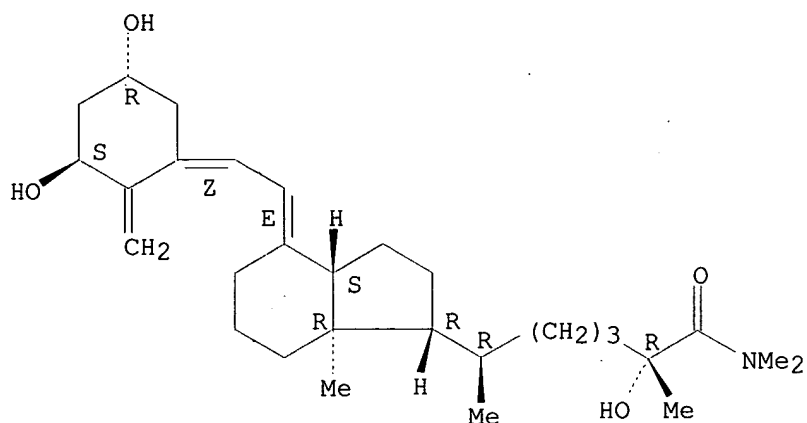
Absolute stereochemistry.  
Double bond geometry as shown.



RN 266344-76-7 USPAT2

CN 9,10-Secocholesta-5,7,10(19)-trien-26-amide, 1,3,25-trihydroxy-N,N-dimethyl-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA INDEX NAME)

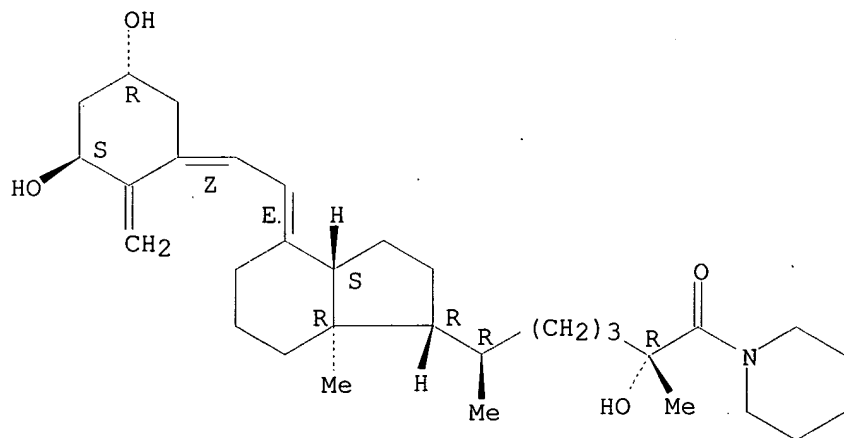
Absolute stereochemistry.  
Double bond geometry as shown.



RN 266344-78-9 USPAT2

CN Piperidine, 1-[(1.alpha.,3.beta.,5Z,7E,25R)-1,3,25-trihydroxy-26-oxo-9,10-secocholesta-5,7,10(19)-trien-26-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



RN 266344-80-3 USPAT2

CN 9,10-Secocholesta-5,7,10(19)-trien-26-amide, N,N-diethyl-1,3,25-trihydroxy-, (1.alpha.,3.beta.,5Z,7E,25R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

